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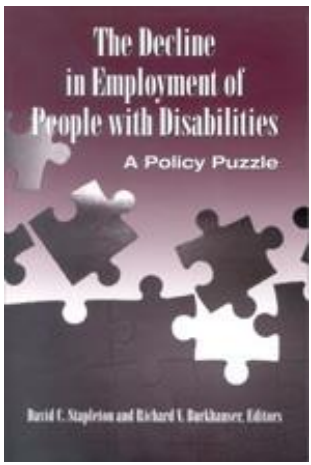
A User's Guide to Current Statistics on the Employment of People with Disabilities



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A User's Guide to Current Statistics on the Employment of People with Disabilities

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The passage of the American with Disabilities Act (ADA) of 1990 was a major political victory for those who believe that working-aged people with disabilities should be fully integrated into the workforce. The intellectual underpinnings of this belief are first, that the path to economic independence is through market work, and second, that the social environment is a more powerful factor in determining employment outcomes than is an individual's impairment. The ADA aims to change the workplace environment and hence increase the employment of people with disabilities by mandating that their employers provide them with reasonable accommodations and protecting them from employment discrimination.[1]

This recognition by social policymakers of the centrality of work for people with disabilities increases the need for reliable statistics to monitor their workforce outcomes and to determine the degree to which social policies aimed at fully integrating people with disabilities into the workforce are succeeding. To do so requires nationally representative survey information that can track the size of the working-aged population with disabilities, its employment success, and the factors that influence such outcomes.

A new and highly controversial literature using currently available, nationally representative employment data sets—the National Health

Interview Survey (NHIS), the Current Population Survey (CPS), and the Survey of Income and Program Participation (SIPP)—argues that the employment of working-aged people with disabilities fell dramatically relative to the rest of the working-aged population after the passage of the ADA (see especially Acemoglu and Angrist 2001; Bound and Waidmann 2002; Burkhauser, Daly, and Houtenville 2001; DeLeire 2000). Even more controversially, Acemoglu and Angrist (2001) and DeLeire (2000) argue that the ADA is primarily responsible for the decline. Critics of this literature, using alternative definitions of the working-aged population with disabilities, argue that the employment rate of working-aged people with disabilities has actually increased since the passage of the ADA, and that the unemployment rate of this population has declined (see especially Kaye 2002 and Chapter 6; Kruse and Schur Chapter 8). Still others dismiss all of these results as fundamentally flawed given that they are based on self-reported work-limitation data that capture neither the actual working-aged population with disabilities nor its employment trends over time (see especially Hale 2001; Kirchner 1996).

Here, we step back from the controversy surrounding the impact of the ADA on employment and focus on two fundamental questions related to measuring the employment outcomes of people with disabilities. First, can a reasonable operational definition of disability be developed from current surveys that will enable policymakers to track the size and employment outcomes of that population? And if yes, are the findings sensitive to alternative definitions of disability and employment?

To address the first question, we use a conceptualization of disability based on Nagi (1965, 1991) and the World Health Organization (Jette and Bradley 2002) to put alternative operational definitions of the working-aged population with disabilities into a consistent context. We argue that questions contained in current data sets are sufficient to determine trends in the prevalence and employment success of working-aged people with disabilities based on reasonable definitions of disability, although efforts should be pursued to improve questions in existing surveys.

To address the second question, we present estimates of the size and employment success of alternatively measured populations of working-aged men and women with disabilities during the 1980s and

the 1990s using data from the NHIS, CPS, and SIPP. We find that the employment rates of working-aged (aged 25–61) men with disabilities fell sharply in the 1990s, while the employment rates of working-aged women with disabilities showed a somewhat smaller decline. The size of the working-aged population with disabilities and its employment success are sensitive to the data we use to capture it, as well as to the types of questions available within a given data set. Nonetheless, we find declining employment trends regardless of whether we define disability based on impairment (NHIS) or activity limitations (NHIS, CPS, or SIPP).

We also examine the potential differences between our findings and those of others who find a more positive employment outlook for people with disabilities (Kaye 2002 and Chapter 6; Kruse and Schur Chapter 8). We show that such differences in employment success are primarily caused by differences in the disability population followed and the employment success measure used, rather than by differences in the survey data itself. Specifically, we show that although our findings of declining employment in the 1990s are robust across impairment- and activity-limitation populations, more positive employment trends can be found using a subcategory of these populations that excludes those who also report being unable to do any work. We argue that using this narrower measure of employment is inappropriate for measuring the success of public policies because the goal of these policies is the integration of all working-aged people with disabilities into employment. The same is true with respect to focusing on the unemployment rate rather than the employment rate. Both these narrower success measures ignore the growing share of the working-aged population in the 1990s with impairment or activity limitations who are, based on their self-reports, considered outside of the labor market.

Our findings are relevant to researchers and policymakers interested in understanding the changing employment outcomes of people with disabilities during the past two decades. We provide a user's guide to the underlying data and assumptions made by researchers attempting to measure the size and employment success of working-aged men and women with disabilities. We offer no firm conclusion about the impact of the ADA or other disability policy changes (e.g., changes in Social Security disability program policy) on employment. However, we strongly argue that when theoretically appropriate populations with

disabilities are followed, and appropriate measures of their employment success are used, the employment of people with disabilities fell in the 1990s.

DATA DESCRIPTION

The three data sources for our analysis all include a nationally representative sample of the population, along with some information on activity limitations and health status. The NHIS is an annual cross-sectional survey of approximately 100,000 noninstitutionalized civilians conducted by the U.S. Centers for Disease Control and Prevention. A major advantage of the NHIS is that it includes detailed health and impairment information, as well as general questions about limitations found in other national surveys. Of particular importance here, each year, one-sixth of NHIS respondents are directly asked about their impairments (e.g., "deaf in both ears," "blind in both eyes," etc.) via a checklist without first going through a screener question. Thus, persons with impairments are identified regardless of whether they report an activity limitation or a doctor visit or a number of other positive screener responses. This allows researchers to capture a random sample of the population with this set of impairments.

Unfortunately, not all impairments are included in the checklist. The most serious omissions are mental impairments other than mental retardation. Although information about mental illness can be obtained from the NHIS, it comes only from those who first answer yes to a screener question (e.g., do you have an activity limitation, have you been to a doctor recently, etc.). A sample of those with a mental illness drawn in this way will miss persons with mental illness who do not have such limitations or health care access (see Houtenville 2002 for a more detailed discussion of this problem in using NHIS data). For this reason, it is difficult to disentangle yearly changes in the prevalence of a condition from changes in access to a doctor or other environmental changes that affect one's likelihood of being asked the condition question in the first place. With regard to mental health conditions, Kaye (2002 and Chapter 6) uses information on health conditions and

impairments that is obtained from screener questions and, as he recognizes, runs the risks associated with this decision.

In general, comparable questions are available in the NHIS starting in 1983, although the survey changed substantially in 1997. A drawback of the NHIS is that it includes relatively limited information on employment and program participation. Burkhauser et al. (2002), Kaye (2002 and Chapter 6), Hill, Livermore, and Houtenville (Chapter 5), and Trupin et al. (1997) have used the NHIS to examine employment outcomes of people with disabilities.

The CPS is an annual cross-sectional survey of approximately 150,000 noninstitutionalized civilians collected by the U.S. Census Bureau and the Bureau of Labor Statistics. It is the main source of official employment and income statistics in the United States. The major advantage of the CPS is that its design and size allow for state-level estimates and that its work-limitation question has been consistently asked since 1981. A major drawback, however, is that it includes very limited health information. Acemoglu and Angrist (2001), Bound and Waidmann (2002), Burkhauser, Daly, and Houtenville (2001), and Burkhauser et al. (2002) have each used the CPS to examine employment outcomes of people with disabilities. Almost all the chapters in this book rely on CPS data in part or in whole to trace the employment of working-aged people with disabilities.

The SIPP is a longitudinal survey collected by the Census Bureau and the Bureau of Labor Statistics that includes several panels of varying sample size, ranging from approximately 40,000 noninstitutionalized persons (1991 panel) to 95,000 noninstitutionalized persons (1996 panel). We use data from the 1990, 1991, 1992, 1993, and 1996 SIPP panels to capture disability prevalence and employment rates for the months of January in 1990, 1991, 1992, 1993, and 1997, respectively.[2] The SIPP gathers basic information about work limitations in the core of each panel. In addition, during its special topical module interviews, it gathers more general information on other activity limitations.[3] Burkhauser and Wittenburg (1996), DeLeire (2000), Kruse and Schur (Chapter 8), McNeil (2000), and Maag and Wittenburg (2002) have used these data to examine employment outcomes of people with disabilities.

Each of these data sources has advantages and disadvantages for examining trends in the employment of people with disabilities. The

NHIS includes several years of consistent and comprehensive information on health, including a series of questions regarding specific impairments, but it has relatively limited information on employment and program participation outcomes. The CPS includes 20 years of detailed data on employment and program participation, but only includes a few questions on general health and work limitations. Finally, the SIPP includes detailed employment and program participation information, as well as some information on limitations in specific activities, but only a few SIPP panels are available for the analysis.

A major issue in measuring trends using these data sets is that some of the disability or outcome measures may change over time in each survey. These changes may, in turn, bias some of the observed trends. For example, McNeil (2000) raises several questions regarding the comparability of disability measures across SIPP panels because of inconsistencies in measured disability prevalence in these panels from 1990 through 1996.[4] We rely on disability questions in the NHIS, CPS, or SIPP, which have been consistently asked across all years.[5] Table 2.1 summarizes the definitions we use for disability populations in each of our data sources.[6]

Our analysis in the ensuing sections focuses on working-aged men and women aged 25–61. This limited age range avoids confusing reductions in work associated with disability with reductions or declines associated with retirement at older ages or initial transitions into the labor force related to education or job shopping at younger ages.

CONCEPTUALIZING DISABILITY

To measure the employment of the working-aged population with disabilities, it is first necessary to define that population. Unfortunately, unlike age or gender, disability is a far more controversial concept to define and measure. There is no universal agreement on the most appropriate definition of the population with disabilities. For example, Mashaw and Reno (1996) argue that the appropriateness of any definition of disability depends on the purpose for which it is used. They document more than 20 definitions of disability used for pur-

Table 2.1 Summary of Disability in the NHIS, CPS, and SIPP

Measure	Definition	Conceptualization level
NIHS		
Impairment	Respondents are asked if they have any of the following impairments: "blindness in both eyes, other visual impairments, deafness in both ears, other hearing impairments, stammering and stuttering, other speech impairments, mental retardation, absence of both arms/hands, one arm/hand, fingers, one or both legs, feet/toes, kidney, breast, muscle of extremity, tips of fingers, and/or toes, complete paralysis of entire body, one side of body, both legs, other extremity; cerebral palsy, partial paralysis one side of body, legs, other extremity, other complete or partial paralysis, curvature or other deformity of back or spine, orthopedic impairment of the back, spina bifida, deformity/orthopedic impairment of hand, fingers, shoulder(s), other upper extremity, flatfeet, clubfoot, other deformity/orthopedic impairment, and cleft palate." Respondents receive one of six condition lists that ask them if they have a specific condition (we focus on conditions in list #2). This method yields a random sample because being asked about a condition is not dependent on one's response to another question. This method captures those with specific conditions but who may or may not report health or functioning difficulties. Only one-sixth of the sample is directly asked about a specific condition.	Impairment
Work limitation	"Does any impairment or health problem NOW keep [person] from working at a job or business? Is [person] limited in the kind OR amount of work [person] can do because of any impairment?"	Activity
CPS		
Work limitation	"Does anyone in this household have a health problem or disability which prevents them from working or which limits the kind or amount of work they can do? [If so,] who is that? (Anyone else?)"	Activity

(continued)

Table 2.1 (continued)

Measure	Definition	Conceptualization level
One year limitation	Any person who reports that he or she has a work limitation in two consecutive CPS interviews one year apart	Longer-term activity
SIPP		
Work limitation	"Does __ have a physical, mental or other health condition which limits the kind or amount of work __ can do?"	Activity
Housework limitation	"Does __ have a physical, mental or other health condition which limits the kind or amount of work __ can do around the house?"	Activity
Limitations in other activities	"Because of a physical or mental health condition, does __ have difficulty doing any of the following by himself/herself (exclude the effects of temporary conditions): Does __ have any difficulty getting around inside the home? Does __ have any difficulty getting around outside the home, for example to shop or visit a doctor's office? Does __ have any difficulty getting into and out of bed or a chair? Does __ have any difficulty taking a bath or a shower? Does — have any difficulty getting dressed? Does __ have any difficulty eating? Does __ have any difficulty using the toilet, including getting to the toilet? Does __ have any difficulty keeping track of money and bills? Does __ have any difficulty preparing meals? Does __ have any difficulty doing light housework, such as washing dishes or sweeping a floor?"	Activity

SOURCE: Derived from various documentation of the National Health Interview Survey (NHIS) 1983–1996, various panels of the Survey of Income and Program Participation (SIPP), and the Current Population Survey (CPS) (1981–2000). See Appendix 2A for details.

poses of entitlement to public or private income transfers, government services, or statistical analysis. Unfortunately, no existing, large, general employment-based data set provides sufficient information on the pathologies, impairments, functional limitations, environmental surroundings, and employment outcomes of a representative sample of the U.S. population to fully capture all these potential definitions.

Most of the new work on the employment of people with disabilities comes from the economics literature, where researchers' definitions of disability frequently are functions of already available nationally representative data rather than original data collection or clinical experience. In most surveys of employment and household income, the data on health come from a small set of questions that elicit self-reported responses on whether a person's health limits the kind or amount of work he or she can perform. Caution must be exercised in using global self-reported health measures because they are subjective and can vary from individual to individual. More important, health responses may not be independent of the economic variables being examined (Bound and Burkhauser 1999).

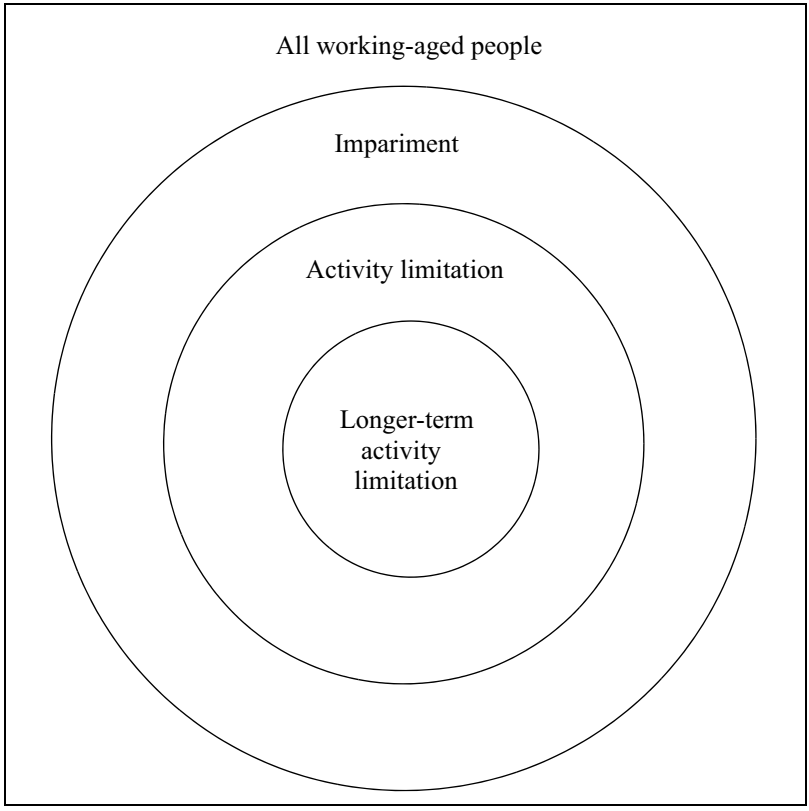
Hale (2001) criticizes the new literature on the employment of working-aged people with disabilities because its findings come from a work-limitation population in the CPS and SIPP. He claims that these results are not representative of the fuller population with disabilities. However, he fails to present an alternative conceptual or operational disability population definition. Rather, he suggests that as yet unspecified health questions be added to the CPS that would better capture this population.

Although no survey questions on disability are ever likely to perfectly capture the true population with disabilities (if one even exists), self-reported answers to questions on currently fielded national surveys have been used to capture representative samples and subsamples of this population. In fact, numerous researchers have shown that self-reported measures of work limitations are highly correlated with both objective assessments of health and clinical measures of disability (see Bound and Burkhauser 1999 for a review of this literature). Nonetheless, any self-reported disability questions must be used with caution, particularly if the answers are sensitive to the respondent's socioeconomic environment.

In Figure 2.1 we place the available empirical evidence based on disability questions from the NHIS, CPS, and SIPP into a framework based on two prominent conceptualizations of disability. The square represents the entire working-aged population, and each of the circles represents a particular population with disabilities.

The largest circle ("Impairment") within the square represents those who report having an impairment. By impairment, we mean a physical or mental loss or abnormality that limits a person's capacity to function. This population could be considered to represent the potential population that many of the supporters of the ADA intended to protect.

Figure 2.1 Disability Conceptualizations



Under the ADA conceptualization, disability is broadly defined as "a physical or mental impairment that substantially limits one or more major life activities, a record of such an impairment, or being regarded as having such an impairment." (See Gordon and Groves 2000 for a broader discussion of the definition of disability in the context of the "protected class" under the ADA and how the courts have narrowed the boundaries of that protected class over time.) This population includes those who are working despite their impairments, and who may not even report a work limitation, as well as those whose impairments, together with their social environment, lead them to report a work limitation. We empirically define this population using the NHIS impairment definition, which includes the largest set of working-aged people with disabilities captured in any of our data sources.

The next circle ("Activity Limitations") represents a subsample of people with impairments who report some type of activity limitation, most closely representing the disability conceptualization by Nagi (1965, 1991) and the World Health Organization.[7] Nagi's conceptualization includes three components. The first, pathology, is the presence of a physical or mental condition that interrupts the physical or mental process of the human body. An example is deafness. This leads to the second component, impairment, which Nagi defines as a physical, anatomical, or mental loss or abnormality that limits a person's capacity to function. For example, deafness limits the ability to interpret sound. The final component, disability, is an inability to perform or a limitation in performing roles and tasks that are socially expected. For example, a person with deafness is unable to use an ordinary telephone.

Nagi's definition is controversial because of the relative importance it places on the socioeconomic environment in determining how pathology results in impairment that leads to disability. Less controversial is his recognition that disability is a dynamic process in which an individual's impairment interacts with the social environment.

Using Nagi's concept, those with a pathology that causes a physical or mental impairment that subsequently limits one or more life activities such as work but who, nevertheless, work would not be considered to have a work limitation. (This would be the case whether work was possible through changes in the work environment, access to rehabilitation, or individual adaptability.) For example, a person with deafness who is accommodated at the workplace with a TTY machine

that permits him or her to use the telephone would not be considered work-limited despite his or her impairment.

Hence, the activity-limited population in the Nagi conceptualization is a subcomponent of the impaired population and is one whose boundary is much more likely to be affected by the social environment. The most commonly used activity-limited definition disability includes those who report a work limitation, which is available in the NHIS, CPS, and SIPP. The population with a given activity limitation will change with the specific activity and the corresponding social environment. We also test whether our findings are sensitive to other measures of activity limitations available in the SIPP, including limitations in housework and limitations in a variety of other activities (see Table 2.1 for a list).[8]

The final and smallest circle in Figure 2.1 ("Longer-Term Activity Limitation") represents persons with the most severe and long-term limitations. This population is the most likely to be eligible for Social Security Disability Insurance (SSDI) or Supplemental Security Income (SSI) benefits based on their inability to perform any gainful employment. We define this circle as people who report a work limitation in both the CPS and in the CPS follow-up survey one year later.

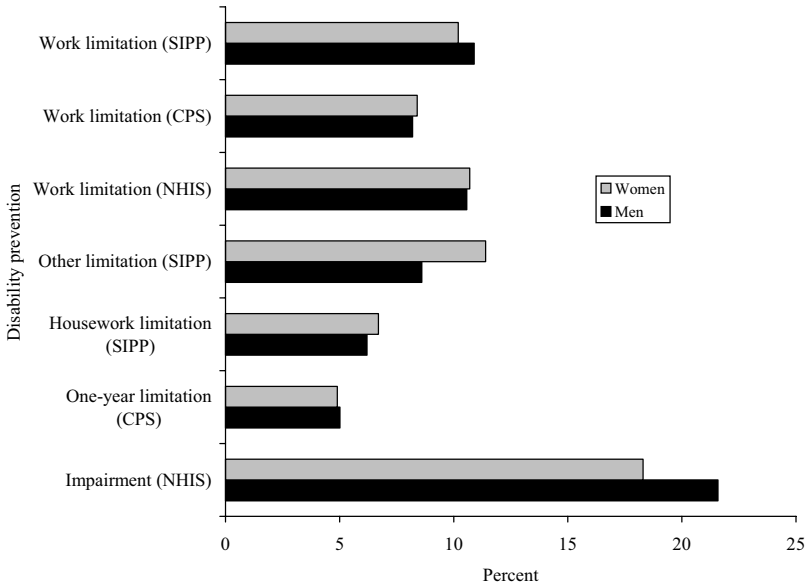
Our conceptual model does not attempt to categorize all of the potential disability definitions that exist in the literature. For example, we do not identify a disability population based on participation in a disability program, such as SSDI or SSI. Nor do we attempt to capture a population who need personal assistance (e.g., cane, wheelchair, etc.). Although individuals in these populations would presumably fall within our impairment population (and many would also fall within our other two circles), these populations represent specific subpopulations with disabilities whose boundaries are even more likely to be influenced by their social environment than the three populations we have conceptualized.

EMPIRICAL ANALYSIS

Disability Prevalence

In Figure 2.2, we present estimates of the size of the populations defined under our various disability definitions from the most recent comparable year (1996) available in each of our data sources.[9] The all

Figure 2.2 Disability Prevalence Rates in 1996 Using Alternative Disability Definitions from the NHIS, CPS, and SIPP



NOTE: The value for the CPS one-year limitation is for the year 1997 because changes in the entire sampling frame in 1996 prohibit the creation of a one-year value for 1996.

SOURCE: Authors' calculations based on data from the 1996 NHIS, 1996 and 1997 CPS, and the 1996 SIPP.

women, captures the largest pool of people with disabilities.[11] The activity-limitation populations, which include the work-limitation populations from the NHIS, CPS, and SIPP, the housework-limitation population from the SIPP, and the other activities-limitation definition from the SIPP, each represent substantially lower prevalence rates of the total population.[12] For men, the various current activity-limitation prevalence rates range from a low of 6.2 percent (SIPP: housework limitations) to a high of 10.9 percent (SIPP: work limitations). For women, the corresponding prevalence rates range from a low of 6.7 percent (SIPP: housework limitations) to a high of 11.4 percent (SIPP: work limitations). Although most of the prevalence rates are similar for men and women, women are more likely to report a higher prevalence of other activities limitations and housework limitations. Finally, as

expected, the full-year CPS work-limitation measure captures the smallest population (5 percent of men and 4.9 percent of women).[13]

These findings are consistent with our disability conceptualizations and their orderings in Figure 2.1 and suggest that relying on a current work-limitation question to define the true disability population misses those with impairments who are sufficiently integrated into the workforce so that they do not report being work limited.[14] Although the severity of the impairment undoubtedly explains much of the difference in magnitude between the impairment population and the other disability populations, it does not explain all of it. This suggests that, for instance, a work limitation response can be influenced by the work environment, rehabilitation opportunities, or the inner capacity of individuals to overcome both their impairments and the barriers to work they face. Alternatively, a current work-limitation question overstates the size of the population with longer-term work limitations.

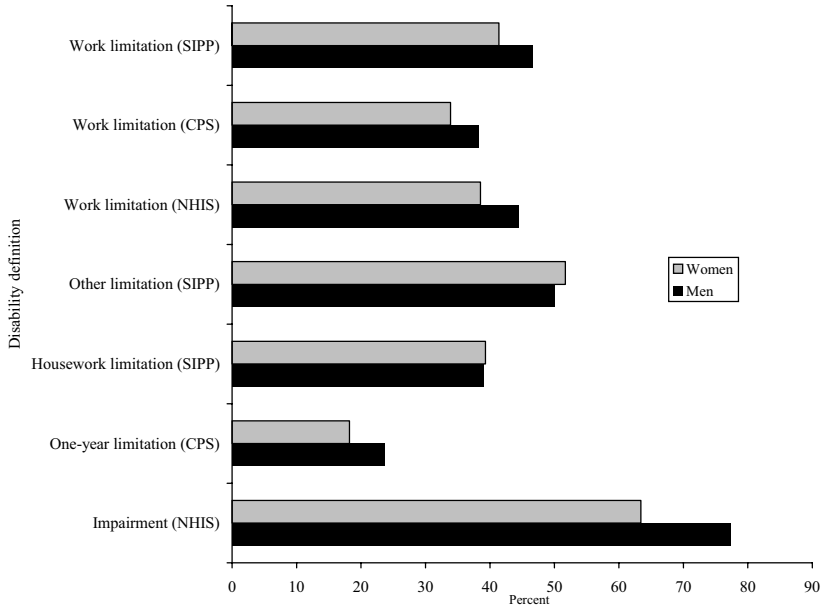
Employment Outcomes

Using the different disability populations we have collected from the NHIS, CPS, and SIPP, we now focus on a major current policy issue: Did the employment rate of working-aged men and women with disabilities fall in the 1990s?

We use a broad measure of employment—employment rate—to examine employment outcomes of each of these populations. In the CPS and SIPP, we consider as employed an individual who reports more than 52 hours of paid employment over the entire year (i.e., one hour per week) from his or her primary and/or secondary job (including self-employment).[15] The NHIS does not contain information on hours of paid employment. Hence, in the NHIS data, we consider individuals to be employed if they report being in a job in the previous two weeks, including those on layoff (see Appendix Table 2A.1 for details).

Figure 2.3 shows differences in employment rates across each of our disability populations using the most recent comparable year (1996). The employment rate of the impairment population is higher than any other group for both men and women. For example, men with impairments have an employment rate of 77.3 percent, whereas the highest employment rate among men in one of the activity-limitation populations is 50.1 percent (SIPP: other activity limitations). Men who

Figure 2.3 Employment Rates in 1996 of Alternatively Defined Disability Populations from the NHIS, CPS, and SIPP



NOTE: The value for the CPS one-year limitation is for the year 1997 because changes in the entire sampling frame in 1996 prohibit the creation of a one-year value for 1996.

SOURCE: Authors' calculations based on data from the 1996 NHIS, 1996 and 1997 CPS, and the 1996 SIPP.

reported longer-term work limitations (CPS one-year work limitations) had employment rates of only 23.6 percent. This is substantially below the one-period CPS work limitation employment rate of 38.2 percent. Similar patterns exist for women.

These findings offer some support for the criticism of Hale (2001) that CPS work-limitation questions will neither capture the larger population with disabilities (our outermost circle in Figure 2.1) nor provide a representative sample of that population with respect to employment behavior. Our data from the NHIS suggest that a substantial portion of those who report impairments do not report having a work limitation, and that this population is much more likely to be employed.[16] On the other hand, our data from the longitudinal component of the CPS show

that current measures of work limitation (CPS: work limitation) in 1996 capture a larger and presumably less-activity-limited population than the subsample of this population that reported a work limitation in both 1996 and 1997 (CPS one-year work limitation).

Nonetheless it is still possible to use a current CPS work-limitation question to estimate trends in both the broader and narrower populations with disabilities that we have conceptualized, if the trends in all these populations are not significantly different from one another over the period of the analysis.[17] It is to this critical issue that we now turn.

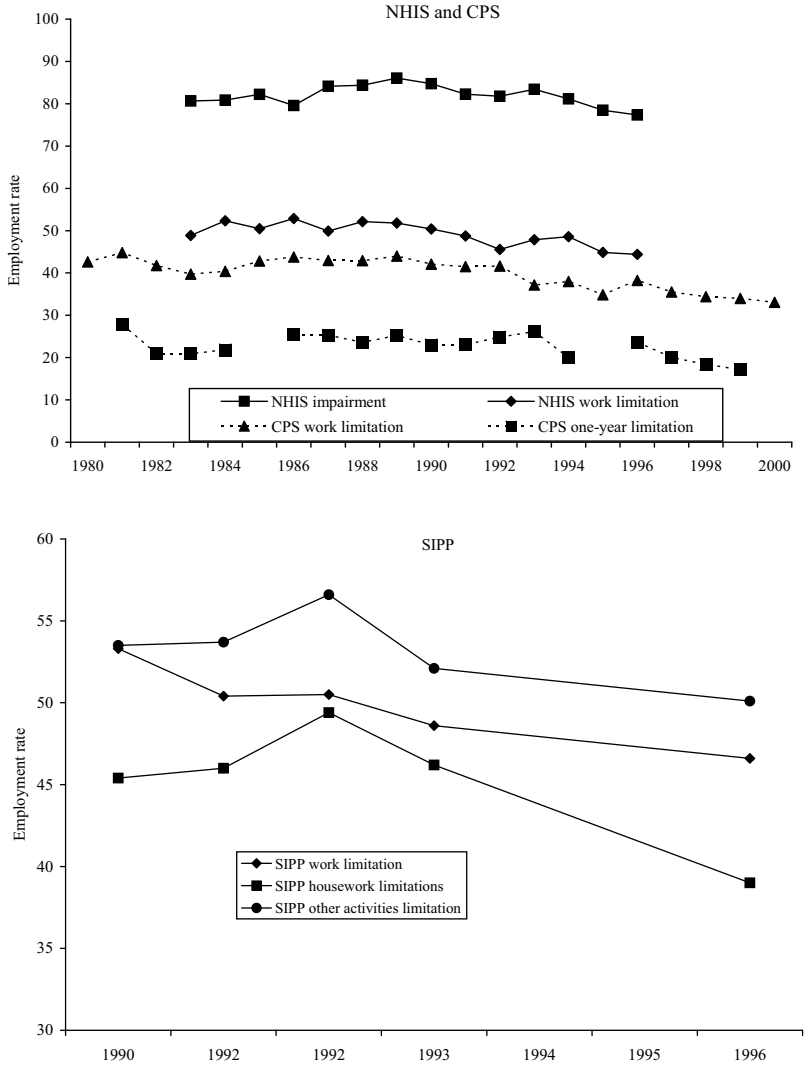
In Figures 2.4 and 2.5, we present employment trend estimates for men and women in each of our disability populations. The first panel in each figure tracks long-term trends in employment outcomes based on the NHIS and CPS. The second tracks shorter-term trends in employment based on SIPP definitions. Both figures track trends during the 1990s. (See Appendix Table 2A.3 for the actual values.)

Prior to 1990, the employment rates of working-aged men and women with disabilities were procyclical in both the NHIS and CPS. In general, there was a dip in employment rates during the recession in the early 1980s and a rise in employment rates as the economy started to grow in the later 1980s.[18]

In the 1990s, however, there was a consistent and steady drop in the employment rates of men with disabilities in all of our disability populations. This drop began with the recession of the early 1990s and continued through the economic expansion of the mid to late 1990s. From 1990 to 1996, employment rates fell in all populations of men with disabilities. The percent reduction across all measures was between 8 percent and 16 percent, with the largest reduction occurring for the SIPP housework-limitation population, which fell 14.1 percent (from 45.4 to 39 percent). The employment trends across all measures are roughly similar.

Employment trends increase during the growth years of the 1980s in all the NHIS and CPS female disability populations (Figure 2.5). In the 1990s, employment fell in all of these populations but not as much as in the male disability populations. Most of these employment rates declined by less than 8 percent, although the CPS work-limitation population and SIPP housework-limitation population both experienced more than a 10 percent employment decline. These trends consistently

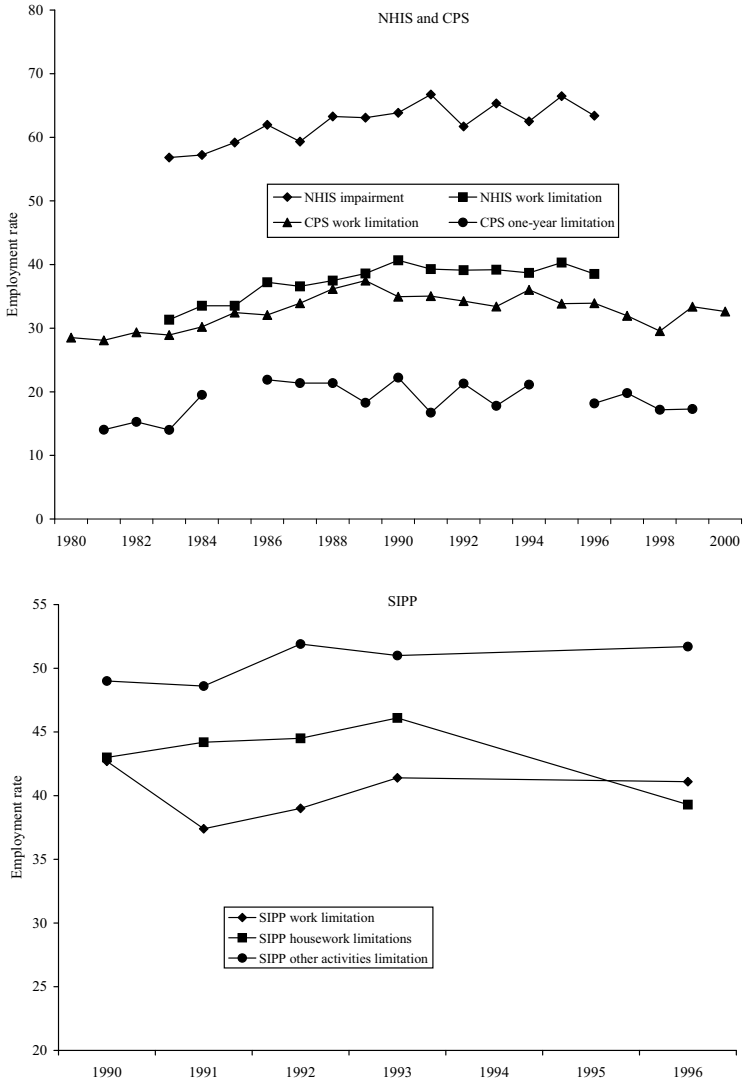
Figure 2.4 Yearly Employment Rate Trends of Men with Disabilities in Alternatively Defined Disability Populations from the NHIS, CPS, and SIPP



NOTE: Changes in the entire CPS sampling frame in 1986 and 1996 prohibit the creation of one-year limitation values for 1985 and 1995.

SOURCE: Authors' calculations based on data from 1983–1996 NHIS, 1981–2000 CPS, and 1990–1993 and 1996 SIPP.

Figure 2.5 Yearly Employment Rate Trends of Women with Disabilities in Alternatively Defined Disability Populations from the NHIS, CPS, and SIPP



NOTE: Changes in the entire CPS sampling frame in 1986 and 1996 prohibit the creation of one-year limitation values for 1985 and 1995.

SOURCE: Authors' calculations based on data from 1983–1996 NHIS, 1981–2000 CPS, and 1990–1993 and 1996 SIPP/

show that working-aged people with disabilities, particularly men, fared poorly in the labor market in the 1990s.

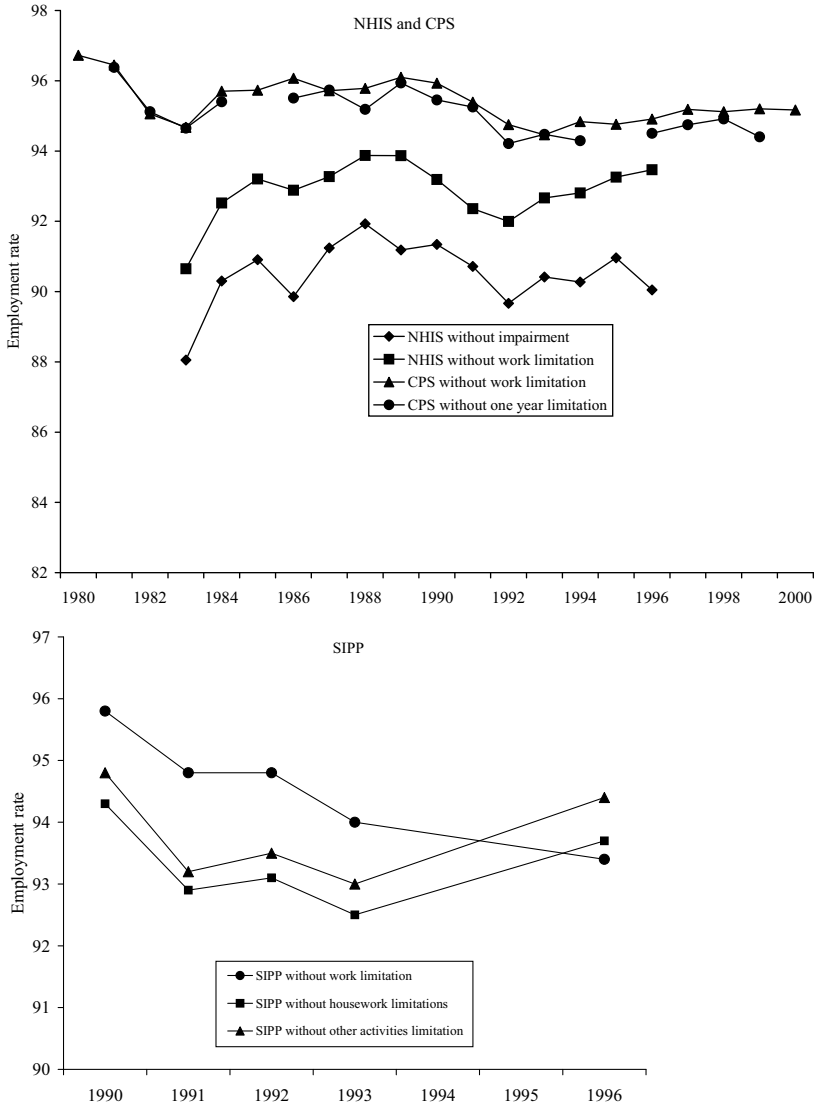
These findings are all the more troubling because the employment of both men (Figure 2.6) and women (Figure 2.7) without disabilities remained procyclical over both the 1980s and 1990s business cycles (see Appendix Table 2A.4 for the actual values). Thus, in the 1990s the relative employment rates of both men and women with disabilities also declined dramatically compared with men and women without disabilities using data from NHIS, CPS, or SIPP.

EXPLAINING THE DIFFERENCES IN EMPLOYMENT TRENDS IN OTHER STUDIES

Our employment trends appear to be inconsistent with those of Kaye (2002 and Chapter 6), who argues that the employment opportunities for people with disabilities improved significantly during the 1990s, using data from the NHIS and CPS. However, as we show below, the differences in our results are primarily due to the populations on which we focus with our common data rather than with the survey data itself.

Kaye argues that to obtain a population more consistent with the ADA, the population with disabilities must exclude those who either have self-reported "no ability to work" and/or who are not looking for work. Below, we produce trends similar to Kaye, using subsamples of our work-limitation populations in the NHIS, CPS, and SIPP. Having done so, we argue that the disability population Kaye chooses to study excludes a substantial portion of people with disabilities. Specifically, we show that his findings result from limiting the population with disabilities to those who report a work limitation and report that they are either looking for work or are able to do some work. In doing so, he excludes all other working-aged people with a work limitation. Likewise, his focus on the unemployment rate of this exclusive population ignores the growing share of the working-aged population with disabilities in the 1990s who are no longer looking for work. The excluded population no doubt includes many people who could and would work

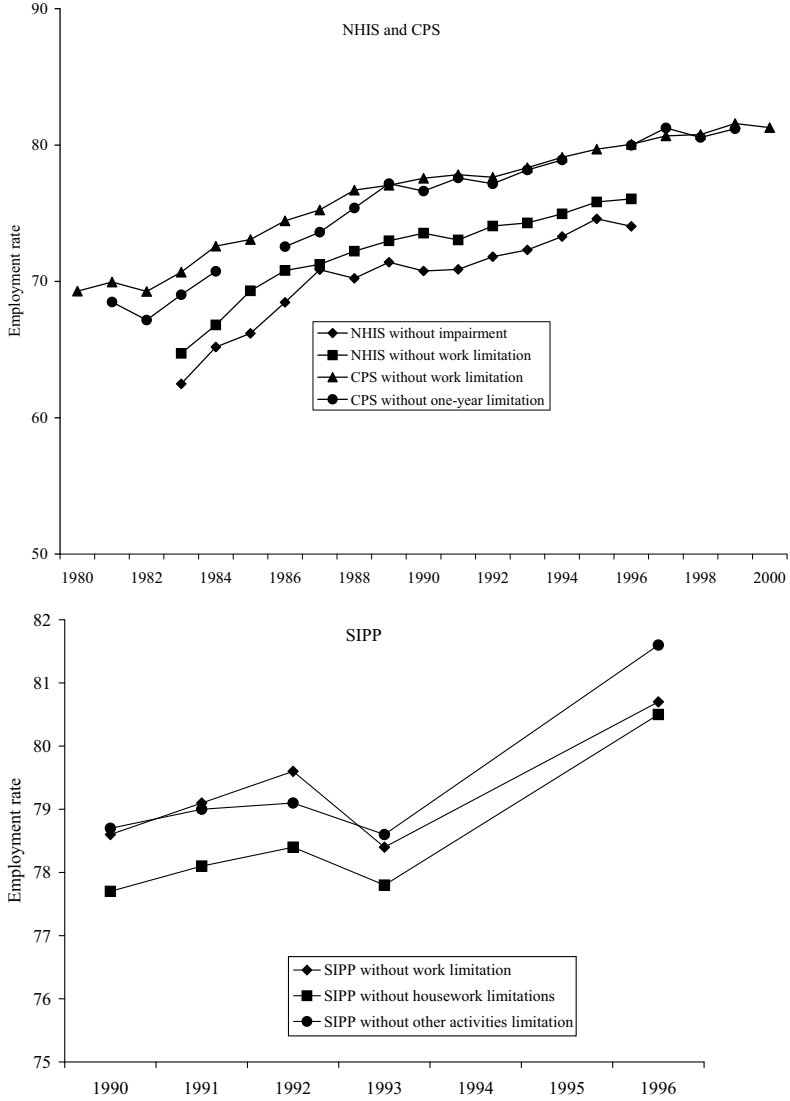
Figure 2.6 Yearly Employment Rate Trends of Men without disabilities in Alternatively Defined Disability Populations from the NHIS, CPS, and SIPP



NOTE: Changes in the entire CPS sampling frame in 1986 and 1996 prohibit the creation of one-year limitation values for 1985 and 1995.

SOURCE: Authors' calculations based on data from 1983–1996 NHIS, 1981–2000 CPS, and 1990–1993 and 1996 CPS.

Figure 2.7 Yearly Employment Rate Trends of Women without Disabilities in Alternatively Defined Disability Populations from the NHIS, CPS, and SIPP



NOTE: Changes in the entire CPS sampling frame in 1986 and 1996 prohibit the creation of one-year limitation values for 1985 and 1995.

SOURCE: Authors' calculations based on data from 1983–1996 NHIS, 1981–2000 CPS, and 1990–1993 and 1996 CPS.

in a different environment, and is therefore of considerable interest for policy purposes.

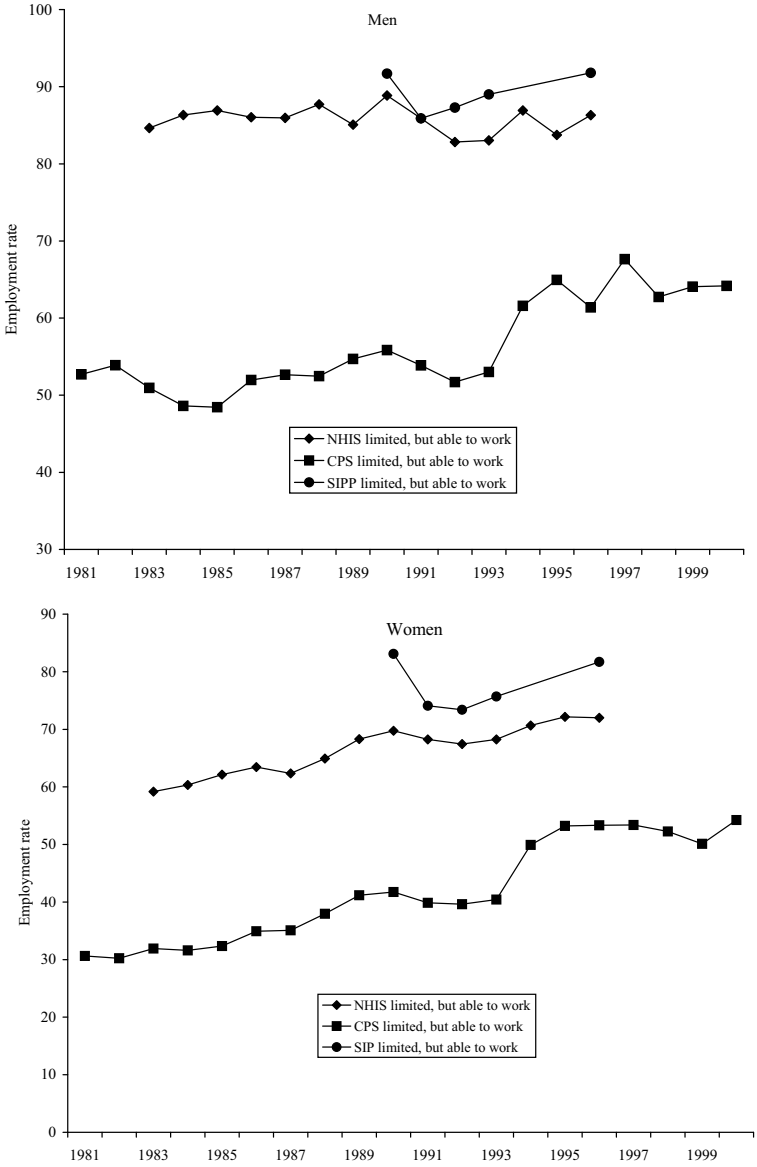
We now focus on the subcomponent of the working-aged population with work limitations examined by Kaye by creating a subsample of those in our work-limitation population who self-reported being "able to work" or who are looking for work.[19] Focusing on this population has some intuitive appeal because it attempts to measure the employment trends of only those who report being able to participate in the labor force and excludes those who report that they cannot work at all and hence are outside the labor market.

The NHIS, CPS, and SIPP each include questions to identify this population. However, although we still use data from the CPS and SIPP, we now focus on employment in the previous week in the CPS and previous month in the SIPP.[20] Although we report trends for all three surveys, changes in the weekly employment questions in the CPS beginning in 1993 have a major effect on trends in employment for the "able-to-work" population. Consequently, this measure is not as useful for measuring long-term employment trends in this population as the "employment in the previous year" measure (which did not change over the period used) in the broader population considered in Figures 2.4 and 2.5.[21]

In Figure 2.8, we show, similar to Kaye, that the employment rates of men and women with work limitations who say they are able to work are relatively flat during the course of the 1990s in the NHIS and SIPP and increase substantially in the CPS (see Appendix Table 2A.5 for actual values). These post–1990 trends are quite different from those reported for the entire work-limitation populations in Figures 2.4 and 2.5. However, prior to 1990, these trends are similar to those we report for the entire work-limitation population for both men and women in Figures 2.6 and 2.7.

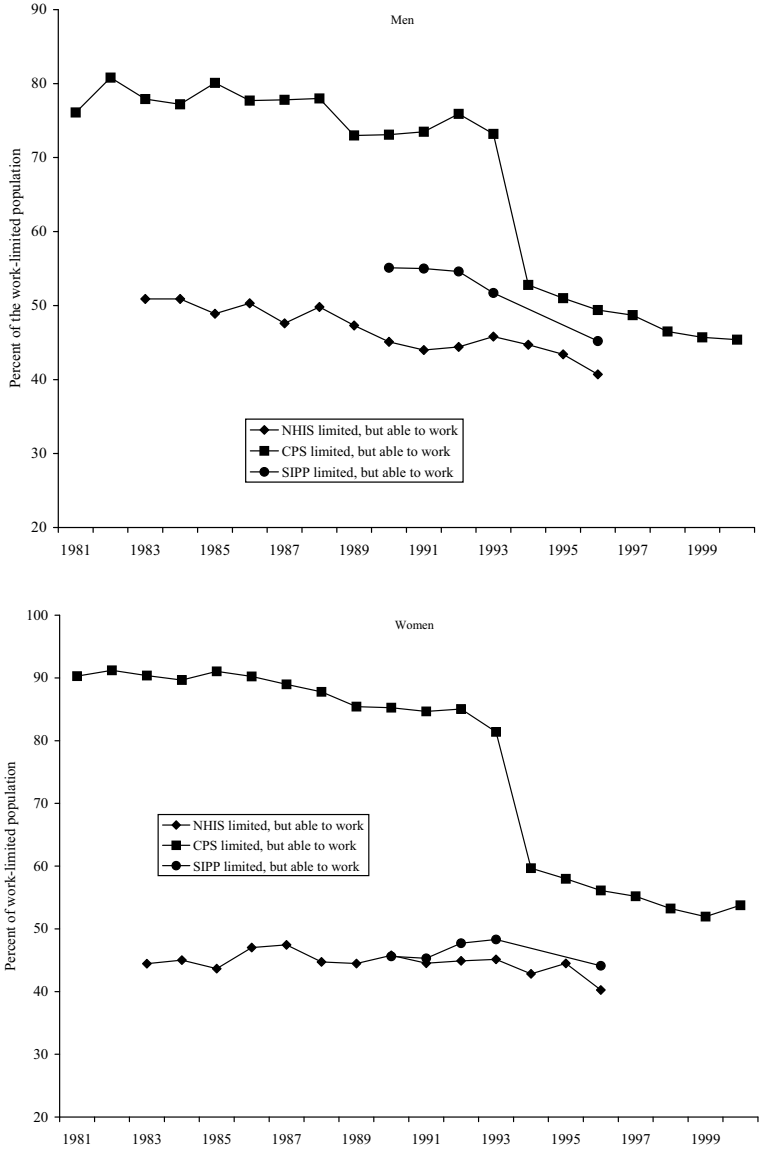
However, in Figure 2.9, we show that the size of the able-to-work subpopulation declined substantially as a share of the entire work-limitation population in the 1990s in all three surveys, particularly in the CPS (see Appendix Table 2A.6 for actual values).[22] Further, in all three surveys, the decline in the overall size of the able-to-work population more than offsets the gain in employment by this group. This explains how the total work-limitation population in both the CPS and NHIS

Figure 2.8 Employment Rate Trends of the Subsample of the Work-Limitation-Based Disability Population Who Report Being Able to Work from the NHIS, CPS, and SIPP



SOURCE: Authors' calculations based on data from 1983–1996 NHIS, 1981–2000 CPS, and 1990–1993 abd 1996 SIPP.

Figure 2.9 Trends in the Proportion of the Work-Limitation-Based Disability Population Who Report Being Able to Work from the NHIS, CPS, and SIPP



surveys falls during the 1990s, even though the subpopulation that is able to work rises.

Given the substantial decline in the population that both reports a work limitation and being able to work, the critical policy issue is whether this change is from a change in the social environment and/or an increase in the severity of the impairment of those who report a work limitation. Of particular importance is the decline in the work-limitation population who report being able to work in the 1990s. If changes in the size of the able-to-work population are driven by changes in the social environment (e.g., changes in Social Security policy, changes in employers' willingness to employ workers with disabilities) rather than by increases in the severity of their impairments, the increased employment rate is a mixed policy success at best. Furthermore, from a behavioral modeling perspective, unless the change is caused totally by an exogenous increase in severity of impairment, changes in the social environment must be considered.

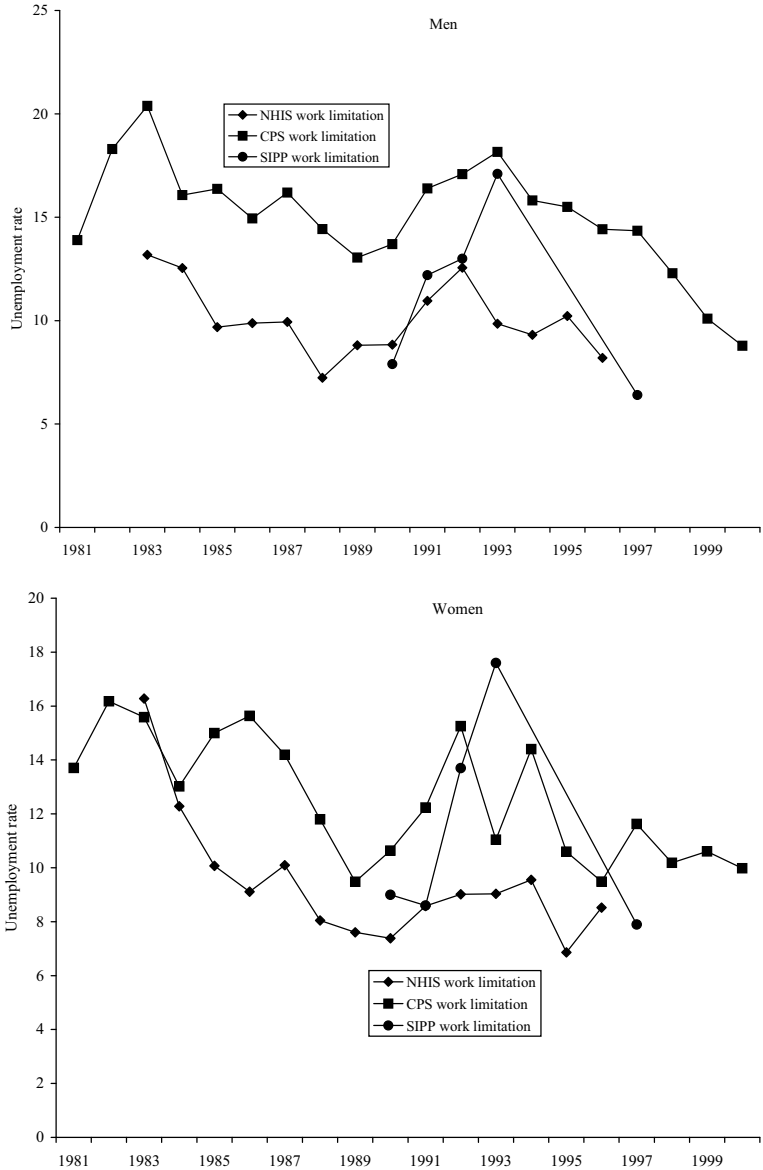
OTHER LABOR MARKET SUCCESS MEASURES

Unemployment Rate

Another success measure used by Kaye (2002 and Chapter 6) to depict labor market outcomes of people with disabilities is the unemployment rate. The unemployment rate is measured by dividing the unemployed population by the total labor force population.[23] This measure has some intuitive appeal because it measures the average labor force outcomes of those who are participating in the labor market. In addition, it is one of the primary measures used to examine labor market success for the entire working-aged population by the Bureau of Labor Statistics.

In Figure 2.10, similar to Kaye, we show that the unemployment rate of men with work limitations drops significantly following the recession of the early 1990s.[24] The unemployment rates of women with work limitations have a much greater variance but are also generally downward during the 1980s and 1990s. In the CPS, the change in the employment question in 1993 is likely to have influenced the large

Figure 2.10 Unemployment Rate Trends in the Work-Limitation-Based Disability Population from the NHIS, CPS, and SIPP



SOURCE: Authors' calculations based on data from 1983–1996 NHIS, 1981–2000 CPS, and 1990–1993 and 1996 SIPP.

drop in the unemployment rate between 1993 and 1994. Despite this measurement issue, the trends for men and, to a lesser extent, women show a decline in the unemployment rate in work-limitation populations during the economic expansion of the 1990s. (See Appendix Table 2A.7 for the actual values in each year.)

In Figure 2.11, however, we show that the drops in the unemployment rates for men and, to a lesser degree, for women with work limitations are accompanied by a drop in their labor force participation rates.[25] The labor force participation rates for men declined significantly from 1990 through 1997, while women experienced a slightly smaller decline. The decline in the labor force participation rate of the work-limitation population raises a question of whether the fall in the unemployment rate seen in Figure 2.10 should be considered a policy success. (See Appendix Table 2A.7 for actual values in each year.)

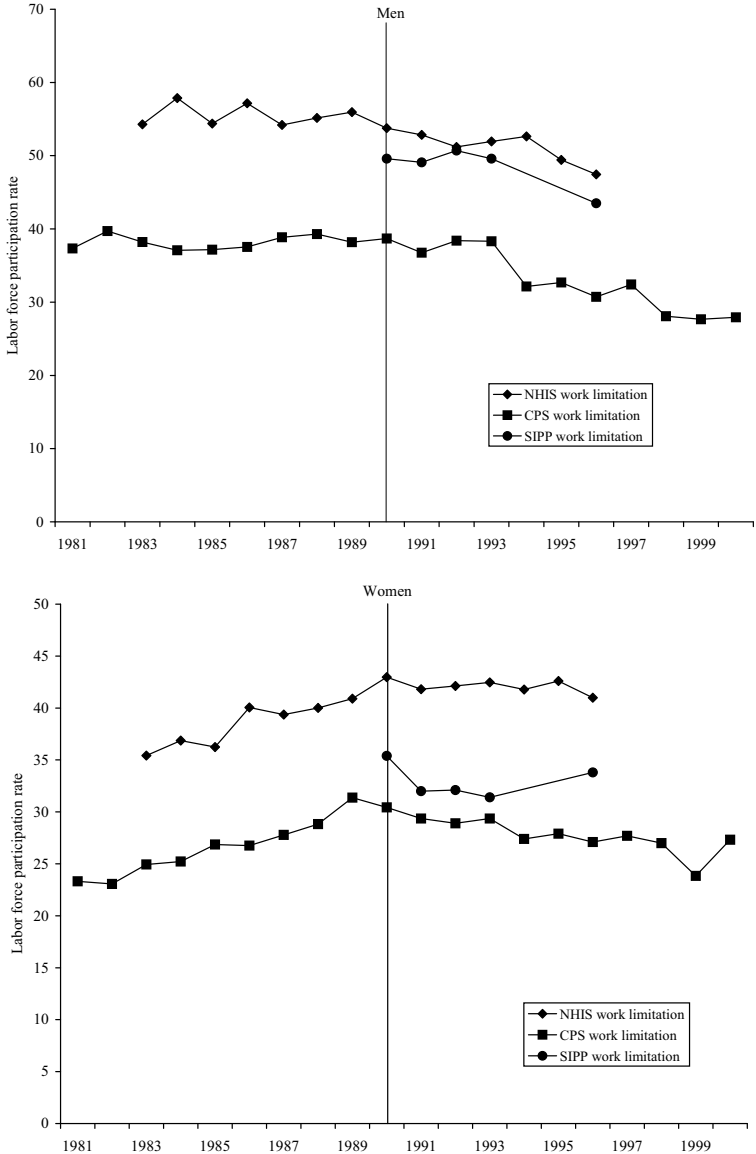
The primary reason for the decline in the unemployment rate was not a rise in the number of employed people with work limitations. Rather, it fell because the decline in employed people with work limitations was somewhat smaller than the decline in the number of unemployed people with work limitations. To the degree this increase in the population out of the labor force was caused by changes in the social environment, this is a very mixed policy success at best. It is hard to understand how policies that not only lower employment but also induce men and women with work limitations who are not currently employed to stop searching for work could be considered successful in integrating people with disabilities into the labor market, even if those policies lower the unemployment rate of the smaller number of men and women who were still in the labor force. For this reason, in our view the employment rate, not the unemployment rate, is the more appropriate success measure for working-aged people with disabilities.

SSDI and SSI Beneficiaries

The final measure we examine related to labor market integration, and a measure that is often included in studies of the ADA, is receipt of SSDI and SSI benefits. Because the NHIS does not include information on program participation, we limit our analysis to the CPS and SIPP.

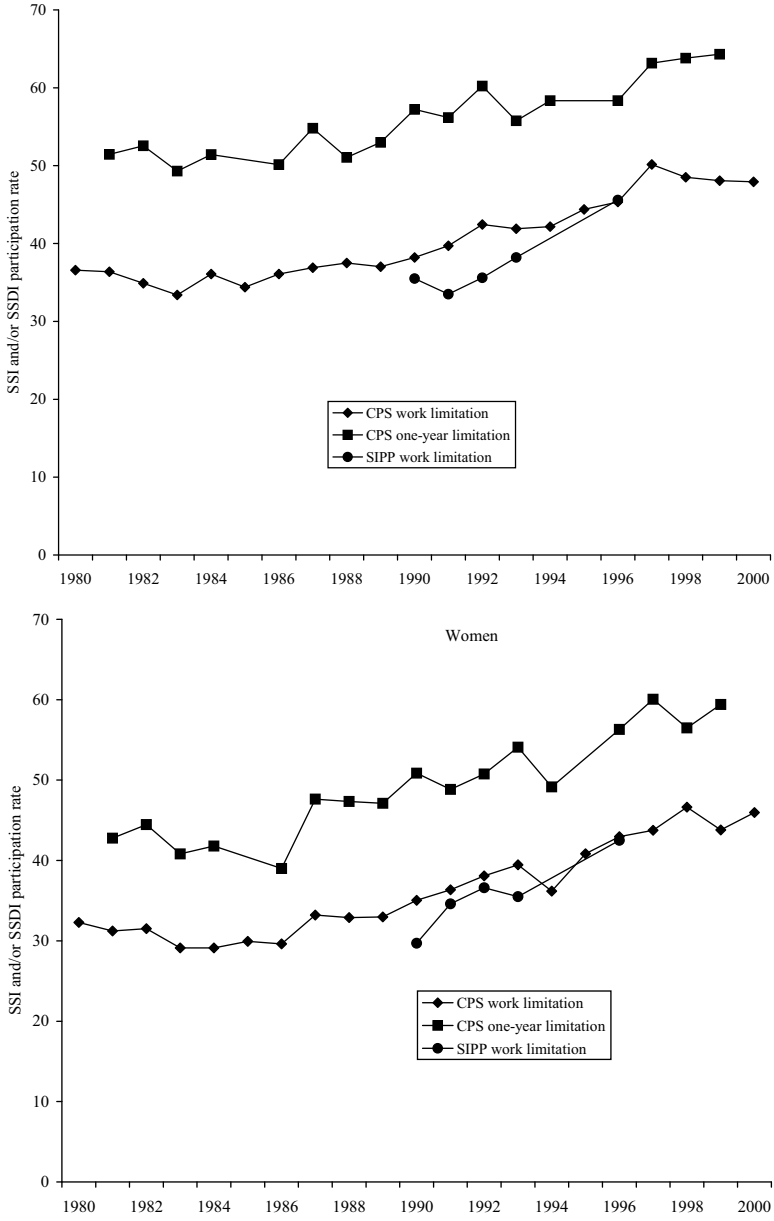
In Figure 2.12, we show that in the early 1980s, the percentage of the work-limitation population who received SSDI or SSI benefits

Figure 2.11 Labor Force Participation Rate Trends in the Work-Limitation-Based Disability Population from the NHIS, CPS, and SIPP



SOURCE: Authors' calculations based on data from 1983–1996 NHIS, 1981–2000 CPS, and 1990–1993 and 1996 SIPP.

Figure 2.12 SSI and SSDI Beneficiary Rate Trends in the Work-Limitation-Based Disability Population from the CPS and SIPP



dropped despite the weakening in the economy. During the rest of the decade, despite six years of economic growth, the prevalence of SSDI modestly increased and the prevalence of SSI substantially increased among working-aged men and women with work limitations. This is found in both the CPS and SIPP data. The number of beneficiaries of SSDI and SSI continued to increase among the work-limitation population in the 1990s. By 2000, nearly one-half of men in the work-limitation populations received either SSDI or SSI compared with 36.6 percent in 1981. (See Appendix Table 2A.8 for actual values in each year.)

The share of the longer-term CPS work-limitation population receiving either SSDI or SSI is even greater than in the current work-limitation CPS population. However, the upward trend is less pronounced—from 51.5 percent in 1982 to 64.3 percent in 2000 (Appendix Table 2A.8). However, almost all the growth in benefit prevalence has occurred since 1990. Furthermore, the sharp declines in the employment rates (Figures 2.4 and 2.5) and the rapid rise in the prevalence of disability benefits in this longer-term, work-limitation-based population are consistent with the decline found in our other disability populations. Subsequent chapters of this volume will attempt to determine the causes of the dramatic changes in employment and disability program take-up rates among these populations.

CONCLUSION

In Figure 2.1, we provided a conceptualization of a population with disabilities that operationally placed those who report an activity limitation (as defined by Nagi 1991) within a broader impairment population. Such a placement recognizes that a reported impairment may or may not lead to an activity limitation, such as work.

Using data from the NHIS, we showed that a substantial share of working-aged people who report serious impairments do not report having a work limitation. We further showed that those with impairments who also report having a work limitation are far less likely to be employed than are people with the same reported impairments who do not report a work limitation. This suggests that current work-limitation

questions such as those in the CPS are likely to understate the prevalence of disability in the working-aged population based on an impairment-based conceptualization of disability and to understate the share of that population that is employed.

However, we also show that the employment trends in these two distinct conceptualizations of the working-aged population with disabilities are not significantly different from each other. Using the current work-limitation question in the CPS to examine the relative responsiveness of employment of working-aged men and women to business-cycle fluctuations during the past two decades, we find that during the 1980s, employment rates for those with work limitations were procyclical, falling during recession years and rising during expansion. In contrast, the employment rate of working-aged men and women with work limitations fell almost continuously throughout the 1990s.

Recognizing that a current CPS work-limitation population is not the ideal source of information about the broader population with impairments, we checked the robustness of our results using data from the NHIS and SIPP. Although the prevalence of "disability" and the employment of the population with "disabilities" using the current work-limitation question in the CPS as our measure are significantly different from those found in both the work-limitation or impairment questions from the NHIS, there is no significant difference between the employment trends found in these populations. Furthermore, when we examined the employment rates of the working-aged populations with longer-term work limitations using the follow-up CPS data, we once again found significant differences in levels, but not in trends. Hence, we argue that the decline in the employment rate among working-aged men and women with disabilities in the 1990s is not an artifact of the current work-limitation questions in the CPS data, but a real and important phenomenon, which can be demonstrated in the NHIS data and the CPS follow-up data.[26]

This leads us to two sets of conclusions. First, the CPS, SIPP, and NHIS provide valuable data to policymakers and researchers interested in tracing the employment success of working-aged men and women with disabilities. Although the current work-limitation question in the CPS is not perfect, it provides a valid measure of the employment trend in this population and in the broader impairment population captured in

the NHIS. Not only would it be unwise to dismiss the power of the current work-limitation question in the CPS to capture long-term employment trends among working people with disabilities, but it would also be unwise to phase out this question, even if additional questions were added that better captured the broader population with disabilities.

Second, the new literature documenting the decline in the relative employment of men with disabilities in the 1990s cannot be dismissed out of hand. We have demonstrated the robustness of this finding in the NHIS, CPS, and SIPP data. Furthermore, when we restrict our CPS population to those who report a work limitation in the CPS follow-up data over one full year, and thus better control for severity, we also find dramatic decreases in their employment rates and dramatic increases in the prevalence of SSDI or SSI beneficiaries. These changes are even greater than those observed in the current CPS work-limitation-based disability population in the 1990s.

These findings appear to be in sharp contrast to those that Kaye (2002 and Chapter 6) finds using similar data. In fact, however, the differences are owing almost entirely to his decision to use the subset of the work-limitation population that reports some ability to work. Although it is true that the employment of this population is rising and its unemployment is falling, Kaye's analysis dismisses the potential importance of the social environment in explaining the sharp decline in the share of the work-limitation population that reports being able to work. Hence, he believes it is appropriate for policy purposes to focus on the subset of the work-limited population that reports being able to work.

This chapter moves the policy debate beyond the question of "did the employment of people with disabilities dramatically fall in the 1990s?" It did. Pinning down the importance of the factors responsible for this drop in employment is the next necessary step to developing policies targeted at reversing this trend.

Notes

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no. 13313980038. It does not necessarily reflect the view of the NIDRR, Cornell University, or the Urban Institute.

1. See Krieger (2000) for a discussion of ADA, its legislative history, and its treatment by the courts.
2. The Census Bureau has collected separate panels of SIPP data in each year from 1984 through 1993 and then again starting in 1996. New SIPP panels were not implemented in 1994 and 1995 for budgetary reasons. We do not use data from pre-1990 SIPP panels for two reasons. First, several of the pre-1990 panels were cut short owing to budgetary considerations. Second, the SIPP gathered very limited disability data in the SIPP panels between 1984 and 1990 (Adler 1991).
3. We only use information from modules that have been consistently collected across all panels. The SIPP includes some information on specific conditions, but only for those who first report a work limitation. Hence, unlike the NHIS, these questions cannot be used to estimate prevalence of impairments in the general population because some people with impairments do not report a work limitation.
4. Maag and Wittenburg (2002) show that changes in the work-limitation question could cause bias in the employment trend of the population with work limitations using these questions. Specifically, they show that most of the problems cited in McNeil (2000) arise because the method of asking the work-limitation question changed in the 1996 panel. In prior SIPP panels, respondents were reminded of their work-limitation responses from previous waves. Starting with the 1996 SIPP, panel respondents were not reminded of their answers in previous waves. This change significantly reduced the prevalence of a work-limitation reported in later periods of the 1996 panel, relative to the pattern found in earlier SIPP panels. The 1996 SIPP panel also allowed people to report a work limitation as a reason for not working, which may increase the prevalence of work limitations in the general population as well as among the unemployed in the 1996 panel. Despite these changes in the 1996 SIPP panel, Maag and Wittenburg (2002) show that it is possible to construct comparable samples of people who report work limitations by using information in the first wave of each panel from 1990 through 1993, together with the various waves of the 1996 panel. Nonetheless, they urge some caution in using the resulting across-panel values because the employment estimates may be biased downward, and they suggest using multiple data sources and disability definitions to examine trends in employment. Importantly, there were no other changes in SIPP questions commonly used in disability research (e.g., housework limitations). Consequently, the comparisons of trends under alternative SIPP disability definitions used in this chapter do not suffer from the same type of potential bias as exists in the work-limitation question.
5. An example is the problematic SIPP two-period work-limitation measure. Because of changes in the 1996 SIPP questionnaire, the prevalence of this measure significantly declines (along with the employment rate for those who report

two consecutive periods of limitations). Therefore, we do not use the measure in our chapter.

6. Appendix Table 2A.1 provides a detailed summary of all variables used in this chapter and the questions on which they are based in the three surveys.
7. See Jette and Bradley (2002) for an excellent comparison of the Nagi and WHO models.
8. Several of these other activities fall under the categories of activities of daily living (ADLs), instrumental activities of daily living (IADL), and other functional limitations. We use other activities as a shorthand to refer to this grouping.
9. The last year that consistent impairment estimates are available in the NHIS is 1996. The one-year disability measure is for the one-year period between the March 1996 and March 1997 CPS surveys.
10. The differences in prevalence rates across definitions are also constant over time (see Appendix Table 2A.1). In general, the relative differences in prevalence rates are approximately the same, although there are some fluctuations in these rates, particularly across the business cycle. As noted above, these fluctuations are consistent with the changing economic conditions noted in Bound and Burkhauser (1999).
11. Here and in all other tables and figures we look at working-aged men and women, aged 25–61.
12. The work-limitation prevalence rates from the NHIS and the SIPP are larger than that from the CPS for both men and women. This difference could arise because of the position and method used to implement the question in the CPS (see Table 2.1 for a description of the questions).
13. Because we do not know when the work limitation began, the actual spell length is at lease one year, assuming that we are not capturing two different spells.
14. These findings are consistent with those of Burkhauser and Houtenville (forthcoming), who illustrate the compositional differences across groups captured under different disability definitions. They show that even those with quite severe impairments do not all report a work limitation. Similarly, as comparisons of prevalence rates of the CPS work-limitation measure to the one-year CPS work-limitation measure indicate, not all those who currently report a work limitation have a longer-term work limitation.
15. Individuals who work fewer than 52 work hours annually are considered not to be employed. Annual hours in the CPS data are calculated by multiplying the number of weeks worked by average hours worked per week. Although our annual definition of employment is somewhat arbitrary, our results are not sensitive to the hour cutoff we chose. In the SIPP, we calculate annual hours by aggregating total monthly hour measures across all 12 months.
16. Burkhauser et al. (2002) use merged data from 1983–1996 in the NHIS to show that within specific impairment categories (e.g., blind in both eyes, deaf in both ears, etc.), a substantial share of those reporting such severe impairments do not report a work limitation. They further show that the employment rates of this subpopulation of severely impaired persons who report no work limitations are sub-

stantially higher than those with the same impairment but who do report a work limitation.

17. More formally, the criticism raised by Hale (2001) is one of measurement error. That is, will a sample of working-aged people who report a current work limitation accurately measure the true population with a disability? Unfortunately, no consensus exists on the dimensions of the conceptually true population with disability. The only effect of this type of measurement error, however, is to introduce noise into the level of the observed event. A potentially more serious problem is selection bias, i.e., that the work-limitation population may represent a select portion of the population with disabilities and, hence, not adequately reflect outcomes for this true population with disabilities. This is a serious concern given that the NHIS work limitation population underestimates the level of prevalence and the employment rate of the NHIS impairment population. To address this more serious problem, in previous work we show that the employment trends of the work-limitation disability population mirror those of other populations with disabilities, including those with impairments (Burkhauser et al. 2002). Specifically, we show that the employment trends in an impairment-based disability population and a work-limitation-based disability population in the NHIS and in the CPS are not significantly different. The impairment-based disability population is presumably less subject to selection bias and less influenced by the social environment. The findings from Burkhauser et al. (2002) also address other concerns raised by Kirchner (1996) and by Kruse and Schur (Chapter 8) that self-perception may change the way people respond to work-limitation questions. For example, if Kirchner's hypothesis were correct, one would have expected the work-limitation population to fall relative to that of the impairment population and for its employment rate to also fall relative to that of the impairment population. We, in fact, find that the work-limitation population increased relative to the impairment population, while the employment trends of both these populations followed the same downward trend. In sum, it is not the level of employment in the working-aged population but its trend that is critical to the debate in the new literature on the employment of working-aged people with disabilities. Consequently, based on our findings, the trends for the work limitation population are real and have important implications for the broader populations of people with disabilities.
18. These trends are discussed in greater detail in Burkhauser et al. (2002).
19. An ability-to-work subsample of broader activity-limitation populations is also used by Kruse and Schur (Chapter 8). They report employment trends that are similar to Kaye (2002 and Chapter 6).
20. We do so because we want to replicate an unemployment concept similar to Kaye (2002 and Chapter 6).
21. In the NHIS and SIPP data, those who report a work limitation are then asked if they are able to work at all. In the CPS data, this is not the case. Operationally, to estimate this population in the CPS, we looked at the population who reported a work limitation and who were either employed or who were not employed but reported not working for some reason other than being disabled. This variable is

consistently constructed from 1981 through 1993. After 1993, a major change occurred in the second part of this measure, which makes this measure after 1993 inconsistent with the previous years.

22. The decline in the population that reports being able to work as a proportion of those with work limitations roughly matches the decline in the overall size of the population of people who report being able to work, given that the size of the work-limitation population was roughly constant during this period.
23. Specifically, it is the ratio of those not currently employed but seeking employment divided by the employed and the unemployed.
24. The unemployment rates vary somewhat across our work-limitation population because of the timeframe used to measure employment. The CPS measure is based on a weekly employment definition, the NHIS measure is based on a two-week employment definition, and the SIPP measure is based on a monthly employment definition.
25. The labor force participation rate is defined as the total number of people in the labor force (unemployed plus employed) divided by the total population.
26. Burkhauser et al. (2002) show this more formally. Because of the short timespan of the SIPP data, no statistical test of its time trends was made.

Appendix 2A

Table 2A.1 Comparison Data Sets and Variable Definitions

Background	The annual cross-sectional survey of the non-institutionalized civilian population of the United States. The federal government uses data from the NHIS to monitor trends in illness and disability. Researchers use this data to analyze access to health care and health insurance and to evaluate federal health programs.	The CPS is a monthly survey of the non-institutionalized population of the United States. Information is collected on labor force characteristics (e.g., employment, earnings, hours of work). In March of each year, the CPS basic monthly survey is supplemented with the Annual Demographic Survey. This supplement focuses on sources of income, government program participation, previous employment, insurance, and a variety of demographic characteristics. The CPS and the Annual Demographic Survey are used extensively by government agencies, academic researchers, policy makers, journalists, and the general public to evaluate government programs, economic well-being and behavior of individuals, families and households. The CPS follows housing units over a course of 4 months and then returns 8 months later to follow them for another 4 months. This allows for the matching of housing units and multi-period analysis. Although people who move out of the housing unit are not followed.	The SIPP is a longitudinal survey that contains detailed monthly demographic, program, employment, and health characteristics for a nationally representative sample of the non-institutionalized resident population of the United States. The purpose of the SIPP is to provide comprehensive information regarding the income and program characteristics from of a representative sample of United States population. Interviewers collect information from a separate rotation group each month regarding their activity in the previous four months. Each panel includes four "rotation" groups. The design allows SIPP interviewers to remain in the field on a continual basis. Each rotation group represents a random sample of the US population. The SIPP interview includes two types of questions: core and topical module (TM). The core questions are updated each interview and include demographic, program participation, and employment information. TM questions relate to special topics of interest that generally do not change each interview period, such as past program participation, work history, or health.
Agency	Center for Disease Control and Prevention	Conducted by the Bureau of the Census on behalf of the Bureau of Labor Statistics	Conducted by the Bureau of the Census on behalf of the Bureau of Labor Statistics

(continued)

Table 2A.1 (continued)

Survey universe	Resident civilian population of the United States: Those on active duty with the Armed Forces and U.S. citizens living abroad are not surveyed, however, the dependents of those on active duty with the Armed Forces who live in the U.S. are included. Those in long-term care facilities are also excluded.	Resident population of the United States: citizens living abroad are not surveyed. Those in long-term care facilities are excluded.	Nationally representative sample of the non-institutionalized resident population of the United States. This population interview includes persons living in-group quarters, such as dormitories, rooming houses, and religious group dwellings. Persons excluded from the SIPP population include crew members of merchant vessels, Armed Forces personnel living in military barracks, institutionalized persons, such as correctional facility inmates, residents of long-term care facilities, and citizens residing abroad. Foreign visitors who work or attend school in this country and their families are eligible for interviews.
Years available and major revisions	The NHIS began in July 1957. We use 1983–1996 because work limitations and impairment information was consistently collected. Major revisions were made to the survey instrument in 1983 and 1997.	The CPS began in the early 1940s, however, the work limitation variable was not asked until 1981. In 1994, major revisions were made to the Basic Monthly Survey and the labor force questions. The changes to the March Supplement were less substantial and reflect the shift to computer-assisted interviews.	The Census Bureau collects data for each SIPP panel, which are available in each year from 1984 through 1993 and then again starting in 1996. While the interview length varies across SIPP panels, since 1990, each panel includes at least eight "interview waves" over approximately a 2.5-year period. Panels for 1994 and 1995 do not exist, because the Census cancelled these efforts in anticipation of the rollout of the 1996 SIPP "redesign." The next SIPP panel will start in 2000. We use data from the 1990, 1991, 1992, 1993, and 1996 panels.

Number of participants	Approximately 80,000 individuals annually	Approximately 150,000 individuals annually	Sample size varies by panel, 40,000 non-institutionalized persons (1991 panel) to 95,000 non-institutionalized persons (1996 panel).
	Specific Information on Disability Measures		
Work limitation	The NHIS asks "[d]oes any impairment or health problem NOW keep [person] from working at a job or business? Is [person] limited in the kind OR amount of work [person] can do because of any impairment?" Those who answer yes to either question are considered to report a work limitation.	The March Supplement asks "[d]oes anyone in this household have a health problem or disability which prevents them from working or which limits the kind or amount of work they can do? [If so,] who is that? (Anyone else?)" Those who answer yes to this question are considered to report a work limitation.	The first core interview asks "Does — have a physical, mental or other health condition which limits the kind or amount of work — can do?"
Housework limitation	Not applicable	Not applicable	In the functional limitations and disability topical module, respondents are asked: "Does — have a physical, mental or other health condition which limits the kind or amount of work — can do around the house?"

(continued)

Table 2A.1 (continued)

Limitations in other activities	Not applicable	Not applicable	In the functional limitations and disability topical module, respondents are asked: "Because of a physical or mental health condition, does — have difficulty doing any of the following by himself/herself (exclude the effects of temporary conditions)?" Does — have any difficulty getting around inside the home? Does — have any difficulty getting around outside the home, for example to shop or visit a doctor's office? Does — have any difficulty getting into and out of bed or a chair? Does — have any difficulty taking a bath or a shower? Does — have any difficulty getting dressed? Does — have any difficulty eating? Does — have any difficulty using the toilet, including getting to the toilet? Does — have any difficulty keeping track of money and bills? Does — have any difficulty preparing meals? Does — have any difficulty doing light housework, such as washing dishes or sweeping a floor?

One-year limitation	Not applicable	A portion of the March Supplement participants were asked about work limitation in two consecutive years. Those who report work limitations in two consecutive years (March to March) are considered to report a two period work limitation. The years 1986 and 1996 are not applicable because the Census Bureau changed the sampling frame and the thus housing units were not consecutively interviewed. Also note, the CPS follows housing units not the people in the households, so that matched files do not contain movers.	Not applicable: While it is possible to create a two period work limitation variable, we exclude this information from our analysis of the SIPP because of potential selection bias issues that arise due to changes in the 1996 SIPP questionnaire.

(continued)

Table 2A.1 (continued)

Partial work limitation	Those who answer no to the question "[D]oes any impairment or health problem NOW keep [person] from working at a job or business?" but answer yes to the question "[I]s [person] limited in the kinds or amount of work [person] can do because of any impairment?" are considered to report a partial work limitation. These two questions are asked in succession.	Those who report work limitation and not the inability to work due to own illness or disability are considered to report a partial work limitation. The inability to work is derived from questions in the CPS Basic Monthly Survey. Prior to 1994, people are employed according to responses to the following question, [w]hat was...doing most of LAST WEEK?" Inability to work due to illness or disability was a possible response. For 1994 and thereafter, people report the inability to work if answer yes to the question, "(Last month you were reported to have a disability.) [d]oes your disability continue to prevent you from doing any kind of work for the next 6 months (including work in the family business or farm)?" Note those who indicate disability yet report positive hours work elsewhere in the survey are coded in the survey. The method used in 1994 and thereafter is substantially different than in prior years and highlights the switch to computer assisted surveys that allow the interviewer to cite previous responses.	Those who respond that they have a work limitation are asked in the work disability topical module (second wave of every SIPP panel): Does ...'s health or condition prevent ... from working at a job or business

Impairment	Respondents receive one of six condition lists that ask them if they have a specific condition (we focus on conditions in list #2). This method yields a random sample because being asked about a condition is not dependent on one's response to another question. This method captures those with specific conditions but who may or may not report having no health or functioning difficulties. Only one-sixth of the sample is directly asked about a specific condition. The set of impairments used in this paper are blindness in both eyes, other visual impairments, deafness in both ears, other hearing impairments, stammering and stuttering, other speech impairments, mental retardation, absence of both arms/hands, one arm/hand, fingers, one or both legs, feet/toes, kidney, breast, muscle of extremity, tips of fingers, and/or toes, complete paralysis of entire body, one side of body, both legs, other extremity; cerebral palsy, partial paralysis one side of body, legs, other extremity, other complete or partial paralysis, curvature or other deformity of back or spine, orthopedic impairment of the back, spina bifida, deformity/orthopedic impairment of hand, fingers, shoulder(s), other upper extremity, flatfeet, clubfoot, or other deformity/ orthopedic impairment, and cleft palate.	Not applicable	Not applicable

(continued)

Table 2A.1 (continued)

Employment measure	In order to be more consistent with the CPS measure of employment in these tables, people are employed if they had a job in the previous two weeks, which includes those on layoff. This definition is based on the following questions: "[during the previous two weeks], did [person] work at any time at a job or business not counting work around the house? (Include unpaid work in the family farm/business.) Even though [person] did not work during those 2 weeks, did [person] have a job a job or business?" ... "Earlier you said that [person] has a job or business but didn't work last week or the week before. Was [person] ... on layoff from a job."	People are employed if they work 52 hours or more and have positive earnings in the previous year. This reflects attachment to the labor force and the underlying survey questions are more consistently worded over time.	We consider an individual who reports more than 52 hours over the entire year (i.e., one hour per week) from their primary and/or secondary job (including self-employment) as employed Individuals with fewer than 52 work hours annually are considered detached from the labor market. We calculate annual hours by aggregating total monthly hour measures across all 12 months.
"Official" employment rate	People are "officially" employed if they had a job in the previous two weeks, excluding those on layoff. This definition is based on the questions: "[during the previous two weeks], did [person] work at any time at a job or business not counting work around the house? (Include unpaid work in the family farm/business.) Even though [person] did not work during those 2 weeks, did [person] have a job a job or business?" ... "Earlier you said that [person] has a job or business but didn't work last week or the week before. Was [person] ... on layoff from a job."	Prior to 1994, people are "officially" employed according to responses to the following question, [w]hat was...doing most of LAST WEEK?" For 1994 and thereafter, people are "officially" employed if "[L]ast week, did you do any work for either pay or profit?" And, "[L]ast week, (in addition to the business,) did you have a job either full or part time? Include any job from which you were temporarily absent."	People are officially employed if they work any week during the previous month. Specifically, if they respond to any of the following categories (1) with a job entire month, worked all weeks, (2) With a job entire month, missed one or more weeks, no time on layoff, (3) With a job entire month, missed one or more weeks, spent time on layoff, (4) With job one or more weeks, no time spent looking or on layoff, or (5) With job one or more weeks, spent one or more weeks looking or on layoff.

"Official" labor force participation rate	People are "officially" in the labor force if they are "officially" employed (see above), on layoff or actively looking for work, based on the responses to the following questions: "Earlier you said that [person] has a job or business but did not work last week or the week before. Was [person] looking for work or on layoff from a job during those 2 weeks?"	Prior to 1994, people are "officially" in the labor force if they are "officially" employed (see above), on layoff or actively looking for work, based on the responses to the following question, "[w]hat was...doing most of LAST WEEK?" For 1994 and thereafter, people are in the labor force if they were "officially" employed (see above) on layoff or actively looking for work, based on the responses to the following questions: "[l]ast week, were you on layoff from a job? Have you been doing anything to find work during the last 4 weeks?"	People are in the labor force if they are employed during any week in the month (see above), or are on layoff, or are actively looking for work. Specifically, if they respond to any of the five categories mentioned above or if they respond (6) No job during month, spent entire month looking or on layoff, or (7) No job during month, spent one or more weeks looking or on layoff
"Official" unemploy-ment rate	People are "officially" unemployed if they are "officially" in the labor force (see above) but not "officially" employed (see above).	People are "officially" unemployed if they are "officially" in the labor force (see above) but not "officially" employed (see above).	People are "officially" unemployed if they are "officially" in the labor force (see above) but not "officially" employed (see above).
Receipt of SSDI/SSI participation	Not Applicable	Those who report receiving income from the Social Security Disability Insurance and Supplemental Security Income (SSI) programs in the previous year are considered. It is possible that some SSI recipients are reporting their children's SSI benefits.	Those who report receiving income from the Social Security Disability Insurance (DI) and Supplemental Security Income (SSI) programs in the previous year are considered. It is possible that some SSI recipients are reporting their children's SSI benefits. For DI, we include respondents under age 65 who reported receipt of Social Security benefits and either categorized their main reason for receiving benefits as "disabled" or stated that they also received Medicare.

SOURCE: Derived from various documentation of the National Health Interview Survey (NHIS) 1983–1996, various panels of the Survey of Income and Program Participation (SIPP), and the Current Population Survey (1981–2000).

Table 2A.2 Disability Prevalence Rates Using Alternative Disability Definitions from the NHIS, CPS, and SIPP, by Gender

	NHIS		CPS		SIPP		
Year	Impairment	Work limitation	Work limitation	One-year limitation	Work limitation	Housework limitation	Other limitation
				Men			
1981	na	na	8.2	na	na	na	na
1982	na	na	8.2	5.0	na	na	na
1983	23.3	10.9	7.8	5.2	na	na	na
1984	24.2	10.2	8.0	4.8	na	na	na
1985	26.1	10.2	8.2	4.9	na	na	na
1986	25.0	10.2	8.3	na	na	na	na
1987	23.9	9.1	8.2	5.3	na	na	na
1988	24.4	9.7	7.7	4.7	na	na	na
1989	22.8	9.9	7.6	4.6	na	na	na
1990	23.7	9.6	7.9	4.7	9.8	5.6	7.7
1991	23.5	9.9	7.7	5.0	9.9	6.2	8.1
1992	26.1	10.9	8.1	4.5	10.2	6.3	8.5
1993	24.5	11.4	8.4	5.3	10.4	6.4	8.6
1994	24.2	10.7	8.8	5.4	na	na	na
1995	22.9	10.9	8.5	5.3	na	na	na
1996	21.6	10.6	8.2	na	10.9	6.2	8.6
1997	na	na	8.3	5.0	na	na	na
1998	na	na	7.8	5.5	na	na	na
1999	na	na	8.0	5.2	na	na	na
2000	na	na	8.0	5.4	na	na	na

	Women						
1981	na	na	7.6	na	na	na	na
1982	na	na	7.6	4.0	na	na	na
1983	16.9	10.7	7.2	3.9	na	na	na
1984	18.3	10.7	7.2	3.8	na	na	na
1985	18.9	10.4	7.5	4.0	na	na	na
1986	17.6	10.0	7.2	na	na	na	na
1987	18.2	9.7	7.2	4.2	na	na	na
1988	17.9	9.6	6.7	3.8	na	na	na
1989	18.0	10.3	6.8	3.3	na	na	na
1990	18.3	9.6	7.0	3.9	9.3	6.8	11.2
1991	19.2	10.0	7.2	3.5	9.1	7.2	11.0
1992	19.4	10.7	7.2	4.2	10.1	8.1	11.9
1993	19.5	11.4	7.2	4.1	10.1	8.0	12.2
1994	19.6	11.4	8.0	4.4	na	na	na
1995	18.7	10.9	8.2	4.5	na	na	na
1996	18.3	10.7	8.4	na	10.2	6.7	11.4
1997	na	na	8.3	4.9	na	na	na
1998	na	na	8.3	5.1	na	na	na
1999	na	na	7.9	5.2	na	na	na
2000	na	na	7.9	4.8	na	na	na

SOURCE: Authors' calculations using the National Health Interview Survey (NHIS), Current Population Survey (CPS), and the Survey of Income and Program Participation (SIPP). See Appendix Table 2A.1 for details.

Table 2A.3 Yearly Employment Rate Trends of Those with Disabilities in Alternatively Defined Disability Populations from the NHIS, CPS, and SIPP, by Gender

	NHIS		CPS		SIPP		
Year	Impairment	Work limitation	Work limitation	One-year limitation	Work limitation	Housework limitation	Other limitation
				Men			
1980	na	na	42.6	na	na	na	na
1981	na	na	44.8	27.8	na	na	na
1982	na	na	41.8	21.0	na	na	na
1983	80.6	48.9	39.7	20.9	na	na	na
1984	80.9	52.4	40.4	21.8	na	na	na
1985	82.2	50.5	42.8	na	na	na	na
1986	79.6	52.9	43.8	25.5	na	na	na
1987	84.1	49.9	43.0	25.3	na	na	na
1988	84.4	52.1	42.9	23.6	na	na	na
1989	86.1	51.8	44.0	25.2	na	na	na
1990	84.7	50.4	42.1	23.0	53.3	45.4	53.5
1991	82.3	48.7	41.5	23.1	50.4	46.0	53.7
1992	81.8	45.6	41.6	24.9	50.5	49.4	56.6
1993	83.4	47.9	37.2	26.1	48.6	46.2	52.1
1994	81.1	48.6	38.0	20.0	na	na	na
1995	78.5	44.9	34.9	na	na	na	na
1996	77.3	44.4	38.2	23.6	46.6	39.0	50.1
1997	na	na	35.5	20.1	na	na	na
1998	na	na	34.4	18.4	na	na	na

1999	na	na	34.0	17.1	na	na	na
2000	na	na	33.1	na	na	na	na
				Women			
1980	na	na	28.5	na	na	na	na
1981	na	na	28.1	14.0	na	na	na
1982	na	na	29.3	15.3	na	na	na
1983	56.8	31.3	28.9	14.0	na	na	na
1984	57.2	33.5	30.2	19.5	na	na	na
1985	59.2	33.5	32.4	na	na	na	na
1986	62.0	37.2	32.1	21.9		1986	
1987	59.3	36.6	33.9	21.4	na	na	na
1988	63.3	37.5	36.2	21.4	na	na	na
1989	63.1	38.6	37.5	18.3	na	na	na
1990	63.9	40.7	34.9	22.2	42.7	43.0	49.0
1991	66.7	39.3	35.0	16.7	37.4	44.2	48.6
1992	61.7	39.1	34.3	21.3	39.0	44.5	51.9
1993	65.3	39.2	33.4	17.8	41.4	46.1	51.0
1994	62.5	38.7	36.0	21.1	na	na	na
1995	66.5	40.3	33.9	na	na	na	na
1996	63.4	38.5	33.9	18.2	41.4	39.3	51.7
1997	na	na	31.9	19.8	na	na	na
1998	na	na	29.5	17.2	na	na	na
1999	na	na	33.4	17.3	na	na	na
2000	na	na	32.6	na	na	na	na

SOURCE: Authors' calculations using the National Health Interview Survey (NHIS), Current Population Survey (CPS), and the Survey of Income and Program Participation (SIPP). See Appendix Table 2A.1 for details.

Table 2A.4 Yearly Employment Rate Trends of Those without Disabilities in Alternatively Defined Disability Populations from the NHIS, CPS, and SIPP, by Gender

	NHIS		CPS		SIPP		
Year	Impairment	Work limitation	Work limitation	One-year limitation	Work limitation	Housework limitation	Other limitation
				Men			
1980	na	na	96.7	na	na	na	na
1981	na	na	96.4	96.4	na	na	na
1982	na	na	95.1	95.1	na	na	na
1983	88.1	90.6	94.7	94.7	na	na	na
1984	90.3	92.5	95.7	95.4	na	na	na
1985	90.9	93.2	95.7	na	na	na	na
1986	89.9	92.9	96.1	95.5	na	na	na
1987	91.2	93.3	95.7	95.7	na	na	na
1988	91.9	93.9	95.8	95.2	na	na	na
1989	91.2	93.9	96.1	95.9	na	na	na
1990	91.3	93.2	95.9	95.5	95.8	94.3	94.8
1991	90.7	92.4	95.4	95.3	94.8	92.9	93.2
1992	89.7	92.0	94.8	94.2	94.8	93.1	93.5
1993	90.4	92.7	94.5	94.5	94.0	92.5	93.0
1994	90.3	92.8	94.8	94.3	na	na	na
1995	91.0	93.3	94.8	na	na	na	na
1996	90.0	93.5	94.9	94.5	93.4	93.7	94.4
1997	na	na	95.2	94.7	na	na	na
1998	na	na	95.1	94.9	na	na	na
1999	na	na	95.2	94.4	na	na	na
2000	na	na	95.2	na	na	na	na

				Women			
1980	na	na	69.3	na	na	na	na
1981	na	na	69.9	68.5	na	na	na
1982	na	na	69.3	67.2	na	na	na
1983	62.5	64.7	70.7	69.0	na	na	na
1984	65.2	66.8	72.6	70.7	na	na	na
1985	66.2	69.3	73.1	na	na	na	na
1986	68.5	70.8	74.4	72.5	na	na	na
1987	70.9	71.3	75.2	73.6	na	na	na
1988	70.2	72.2	76.7	75.4	na	na	na
1989	71.4	73.0	77.0	77.2	na	na	na
1990	70.8	73.5	77.6	76.6	78.6	77.7	78.7
1991	70.9	73.0	77.8	77.6	79.1	78.1	79.0
1992	71.8	74.1	77.6	77.2	79.6	78.4	79.1
1993	72.3	74.3	78.3	78.2	78.4	77.8	78.6
1994	73.3	75.0	79.1	789	na	na	na
1995	74.6	75.8	79.7	na	na	na	na
1996	74.0	76.1	80.1	80.0	80.7	80.5	81.6
1997	na	na	80.7	81.3	na	na	na
1998	na	na	80.8	80.6	na	na	na
1999	na	na	81.6	81.2	na	na	na
2000	na	na	81.3	na	na	na	na

SOURCE: Authors' calculations using the National Health Interview Survey (NHIS), Current Population Survey (CPS), and the Survey of Income and Program Participation (SIPP). See Appendix Table 2A.1 for details.

Table 2A.5 Employment Rate Trends of the Subsample of the Work-Limitation-Based Disability Population Who Report Being "Able to Work" from the NHIS, CPS, and SIPP, by Gender

	Men			Women		
Year	NHIS	CPS	SIPP	NHIS	CPS	SIPP
1981	na	52.7	na	na	30.6	na
1982	na	53.9	na	na	30.2	na
1983	84.7	50.9	na	59.2	31.9	na
1984	86.3	48.6	na	60.3	31.6	na
1985	86.9	48.4	na	62.1	32.4	na
1986	86.0	52.0	na	63.4	34.9	na
1987	86.0	52.7	na	62.4	35.1	na
1988	87.7	52.5	na	64.9	38.0	na
1989	85.1	54.7	na	68.3	41.2	na
1990	88.9	55.8	91.7	69.7	41.7	83.1
1991	85.9	53.9	85.9	68.2	39.8	74.1
1992	82.8	51.7	87.3	67.4	39.6	73.4
1993	83.0	53.0	89.0	68.2	40.4	75.7
1994	86.9	61.6	na	70.7	49.9	na
1995	83.7	64.9	na	72.2	53.2	na
1996	86.3	61.4	91.8	72.0	53.3	81.7
1997	na	67.6	na	na	53.4	na
1998	na	62.7	na	na	52.3	na
1999	na	64.1	na	na	50.1	na
2000	na	64.2	na	na	54.2	na

SOURCE: Authors' calculations using the National Health Interview Survey (NHIS), Current Population Survey (CPS), and the Survey of Income and Program Participation (SIPP). See Appendix Table 2A.1 for details.

Table 2A.6 Trends in the Proportion of the Work-Limitation-Based Disability Population Who Report Being "Able to Work" from the NHIS, CPS, and SIPP, by Gender

	Men			Women		
Year	NHIS	CPS	SIPP	NHIS	CPS	SIPP
1981	na	76.1	na	na	90.3	na
1982	na	80.8	na	na	91.2	na
1983	50.9	77.9	na	44.4	90.4	na
1984	50.9	77.2	na	45.0	89.7	na
1985	48.9	80.1	na	43.7	91.0	na
1986	50.3	77.7	na	47.0	90.2	na
1987	47.6	77.8	na	47.4	89.0	na
1988	49.8	78.0	na	44.7	87.8	na
1989	47.3	73.0	na	44.5	85.4	na
1990	45.1	73.1	55.1	45.8	85.3	45.6
1991	44.0	73.5	55.0	44.5	84.7	45.3
1992	44.4	75.9	54.6	44.9	85.0	47.7
1993	45.8	73.2	51.7	45.1	81.4	48.3
1994	44.7	52.8	na	42.8	59.7	na
1995	43.4	51.0	na	44.5	58.0	na
1996	40.7	49.4	45.2	40.2	56.1	44.1
1997	na	48.7	na	na	55.2	na
1998	na	46.5	na	na	53.2	na
1999	na	45.7	na	na	51.9	na
2000	na	45.4	na	na	53.8	na

SOURCE: Authors' calculations using the National Health Interview Survey (NHIS), Current Population Survey (CPS), and the Survey of Income and Program Participation (SIPP). See Appendix Table 2A.1 for details.

Table 2A.7 Unemployment Rate and Labor Force Participation Trends of Those in the Work-Limitation-Based Disability Population from the NHIS, CPS, and SIPP, by Gender

	NHIS		CPS		SIPP	
Year	Unemployment	Labor force participation	Unemployment	Labor force participation	Unemployment	Labor force participation
			Men			
1981	na	na	13.9	37.3	na	na
1982	na	na	18.3	39.7	na	na
1983	13.2	54.3	20.4	38.2	na	na
1984	12.5	57.9	16.1	37.1	na	na
1985	9.7	54.4	16.4	37.2	na	na
1986	9.9	57.2	14.9	37.5	na	na
1987	9.9	54.2	16.2	38.9	na	na
1988	7.2	55.2	14.4	39.3	na	na
1989	8.8	55.9	13.0	38.2	na	na
1990	8.8	53.8	13.7	38.7	7.9	49.6
1991	11.0	52.9	16.4	36.7	12.2	49.1
1992	12.6	51.2	17.1	38.4	13.0	50.7
1993	9.9	51.9	18.2	38.3	17.1	49.6
1994	9.3	52.6	15.8	32.2	na	na
1995	10.2	49.4	15.5	32.7	na	na
1996	8.2	47.4	14.4	30.7	43.5	43.5
1997	na	na	14.3	32.4	na	na
1998	na	na	12.3	28.1	na	na
1999	na	na	10.1	27.7	na	na
2000	na	na	8.8	27.9	na	na

			Women			
1981	na	na	13.7	23.3	na	na
1982	na	na	16.2	23.1	na	na
1983	16.3	35.4	15.6	24.9	na	na
1984	12.3	36.9	13.0	25.2	na	na
1985	10.1	36.2	15.0	26.9	na	na
1986	9.1	40.1	15.6	26.8	na	na
1987	10.1	39.4	14.2	27.8	na	na
1988	8.0	40.0	11.8	28.8	na	na
1989	7.6	40.9	9.5	31.4	na	na
1990	7.4	43.0	10.6	30.4	9.0	35.4
1991	8.6	41.8	12.2	29.4	8.6	32.0
1992	9.0	42.1	15.3	28.9	13.7	32.1
1993	9.0	42.5	11.0	29.4	17.6	31.4
1994	9.6	41.8	14.4	27.4	na	na
1995	6.9	42.6	10.6	27.9	na	na
1996	8.5	41.0	9.5	27.1	7.9	33.8
1997	na	na	11.6	27.7	na	na
1998	na	na	10.2	27.0	na	na
1999	na	na	10.6	23.8	na	na
2000	na	na	10.0	27.3	na	na

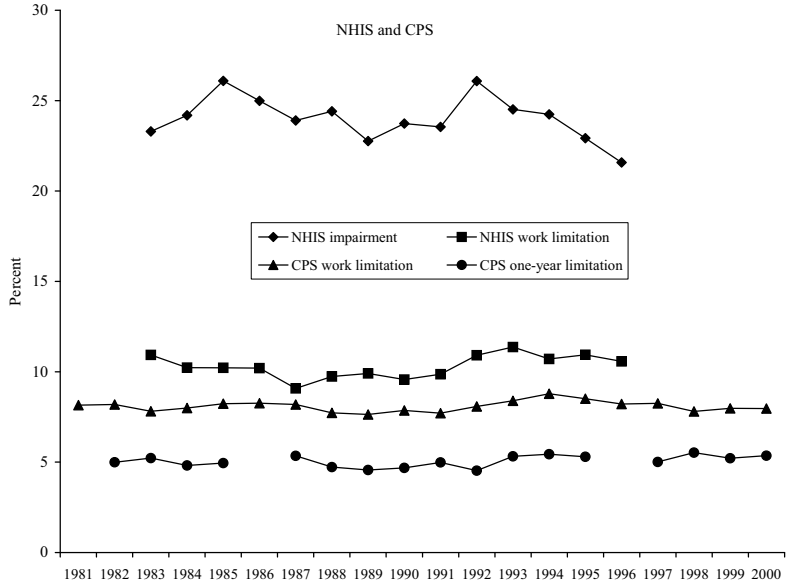
SOURCE: Authors' calculations using the National Health Interview Survey (NHIS), Current Population Survey (CPS), and the Survey of Income and Program Participation (SIPP). See Appendix Table 2A.1 for details.

Table 2A.8 SSI and SSDI Beneficiary Rate Trends in the Work-Limitation-Based Disability Population from the CPS and SIPP, by Gender

	Men			Women		
	CPS			CPS		
Year	Work limitation	One-year limitation	SIPP	Work limitation	One-year limitation	SIPP
1980	36.6	na	na	32.3	na	na
1981	36.4	51.5	na	31.2	42.8	na
1982	34.9	52.6	na	31.5	44.5	na
1983	33.4	49.3	na	29.1	40.8	na
1984	36.1	51.4	na	29.1	41.8	na
1985	34.4	na	na	29.9	na	na
1986	36.1	50.1	na	29.6	39.0	na
1987	36.9	54.8	na	33.2	47.6	na
1988	37.5	51.0	na	32.9	47.3	na
1989	37.0	53.0	na	33.0	47.1	na
1990	38.2	57.2	35.5	35.0	50.9	29.7
1991	39.7	56.2	33.5	36.3	48.8	34.6
1992	42.4	60.2	35.6	38.1	50.8	36.6
1993	41.9	55.8	38.2	39.5	54.1	35.5
1994	42.2	58.3	na	36.2	49.2	na
1995	44.4	na	na	40.8	na	na
1996	45.3	58.3	45.6	43.0	56.3	42.5
1997	50.1	63.2	na	43.7	60.1	na
1998	48.5	63.8	na	46.6	56.5	na
1999	48.1	64.3	na	43.8	59.4	na
2000	47.9	na	na	46.0	na	na

SOURCE: Authors' calculations using the National Health Interview Survey (NHIS), Current Population Survey (CPS), and the Survey of Income and Program Participation (SIPP). See Appendix Table 2A.1 for details.

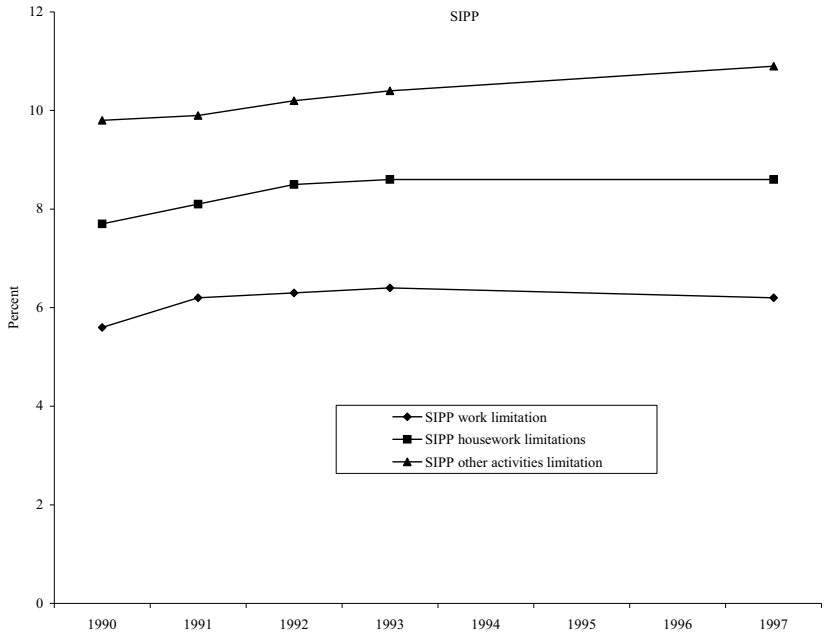
Figure 2A.1 Annual Disability Prevalence Rates of Men in Alternatively Defined Disability Populations from the NHIS, CPS, and SIPP



NOTE: Changes in the entire CPS sampling frame in 1986 and 1996 prohibit the creation of one-year limitation values for these years.

SOURCE: Authors' calculations based on data from 1983–1996 NHIS, 1981–2000 CPS, and 1990–1993 and 1996 SIPP.

Figure 2A.1 (continued)



NOTE: Changes in the entire CPS sampling frame in 1986 and 1996 prohibit the creation of one-year limitation values for these years.

SOURCE: Authors' calculations based on data from 1983–1996 NHIS, 1981–2000 CPS, and 1990–1993 and 1996 SIPP.

Figure 2A.2 Annual Disability Prevalence Rates of Women in Alternatively Defined Disability Populations from the NHIS, CPS, and SIPP

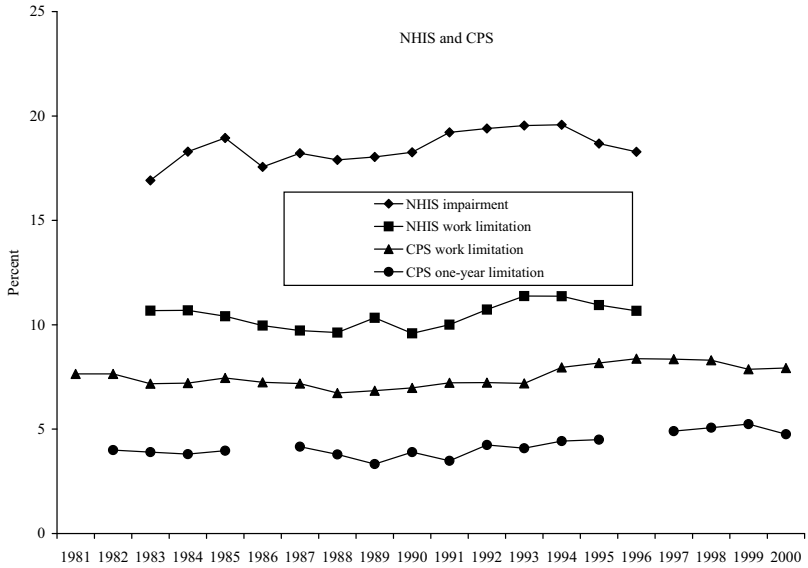
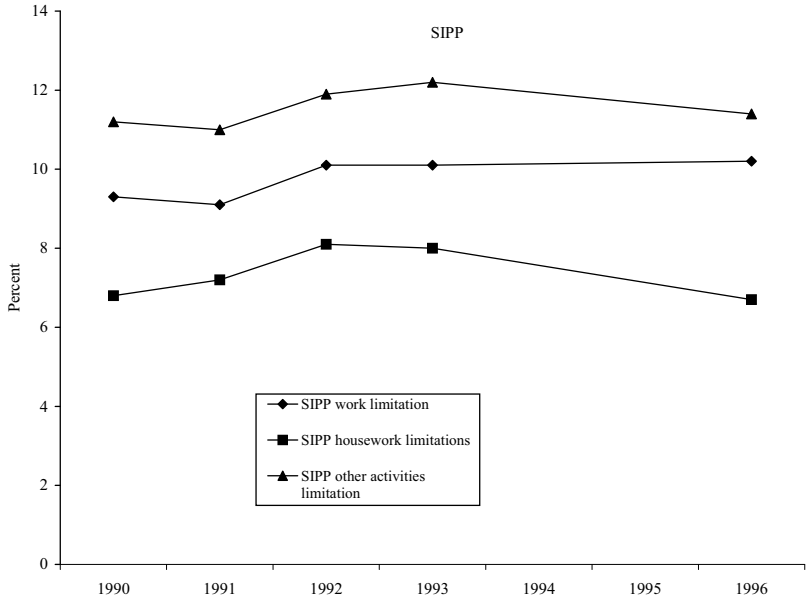


Figure 2A.2 (continued)



NOTE: Changes in the entire CPS sampling frame in 1986 and 1996 prohibit the creation of one-year limitation values for these years.

SOURCE: Authors' calculations based on data from 1983–1996 NHIS, 1981–2000 CPS, and 1990–1993 and 1996 SIPP.

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The Decline in Employment of People with Disabilities

A Policy Puzzle

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